

Exhibit 1

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

CIRBA INC. (d/b/a DENSIFY)
and CIRBA IP, INC.,

Plaintiffs/Counter-Defendants,

v.

VMWARE, INC.,

Defendant/Counter-Plaintiff.

C.A. No. 19-742-LPS

(Consolidated)

**VMWARE, INC.’S SECOND SET OF INTERROGATORIES TO CIRBA INC.
AND CIRBA IP, INC. IN THE CONSOLIDATED ACTION (NO. 36)**

Pursuant to Rules 26 and 33 of the Federal Rules of Civil Procedure (“Federal Rules”),
the District of Delaware Local Rules (“Local Rules”), and any applicable local procedures, laws,
or Court orders, VMware, Inc. requests that Cirba Inc. and alleged Counter-Plaintiff in C.A.
No. 20-272, Cirba IP, Inc., fully answer and verify these Second Set of Interrogatories.

DEFINITIONS

The following definitions apply to each instruction and Interrogatory below:

1. “You,” “Your,” and/or “Cirba” means Cirba Inc. (d/b/a Densify), including its predecessors, successors, predecessors-in-interest, successors-in-interest, subsidiaries, divisions, parents, and/or affiliates, past or present, any companies that have a controlling interest in Cirba Inc. (d/b/a Densify), and any current or former employee, officer, director, principal, agent, consultant, representative, or attorney thereof, or anyone acting on its behalf.
2. “VMware” means VMware, Inc.
3. “687 patent” means U.S. Patent No. 8,209,687.
4. “492 patent” means U.S. Patent No. 10,523,492.

5. ““459 patent” means U.S. Patent No. 10,951,459.

6. “Communication(s)” means any transmission of Information between persons by any means or medium, whether in original, draft, or copy form, whether stored in hard copy, on tape, or electronically, and whether oral or in writing, including: conversations; correspondence; electronic mails; telexes; facsimile transmissions; telecopies; recordings; telephone or message logs; notes or memoranda; and any translations.

7. “Describe” means provide a detailed and fulsome response accounting for all materially relevant facts, circumstances, Documents, and identifications relating to Your answer to an Interrogatory.

8. “Document(s)” has its broadest meaning under Rule 34(a) of the Federal Rules and includes Communications, and “writing(s)” and “recording(s)” under Rule 1001 of the Federal Rules of Evidence.

9. “Identify,” “Identity,” and “Identification” mean:

(a) for an individual, to state the individual’s full name and current or last known personal address, personal telephone number, employer, employment position, dates of employment, business address, and business telephone number and to describe the individual’s employment responsibilities;

(b) for a Person besides a natural person (including a business or other entity), to state the Person’s full name, place and date of incorporation or formation, and principal place of business and the natural persons employed by or related to that entity with knowledge of the matters for which the entity is named;

(c) for a Document (whether or not privilege is claimed), to state its type, date of creation, page length, drafters, authors, signatories, date of Communication, addressees,

recipients, current location, current custodian, and corresponding Bates numbers for all originals and copies and to summarize its subject matter and contents briefly;

(d) for a Communication, to state its type and date and the parties to it, to summarize its subject matter and contents briefly, and to identify all Documents recording the Communication and any corresponding Bates numbers; and

(e) for an act or event, to describe it and state the circumstances that gave rise to it, the dates on or over which it occurred, the Person(s) who were involved, the Person(s) knowledgeable of it, how You learned of it, and any Document(s) memorializing or describing it.

10. “Information” means information in any form, including documentary, electronic, graphical, and tabular forms, and whether oral, written, or electronic.

11. “Person” means a natural person as well as a business entity or other organization or association, including a partnership, company, proprietorship, joint venture, corporation, government agency, or unincorporated association.

12. “Prior Art References” includes the following information as described in VMware’s Answer to Cirba’s Amended Counterclaims (D.I. 1009 at 37-82), and any other Documents or information that may subsequently be identified in connection with VMware’s inequitable conduct defense:

- *Cirba Inc. et al. v. VMware, Inc.*, Civil Action No. 19-742 (D. Del.) (“the 742 Delaware Litigation”);
- U.S. Patent No. 8,347,297 (Mateo);
- U.S. Patent Publication No. 2007/0271560 (Wahlert);
- VMware VirtualCenter Product 2006 Datasheet (VMW00067110), also available online at

- https://web.archive.org/web/20060621061745/http://www.vmware.com/pdf/vc_datasheet.pdf (*see VMW00105025*);
- VMware VMotion Product Datasheet (VMW00067304), also available online at https://web.archive.org/web/20060625065949/http://www.vmware.com/pdf/vmotion_datasheet.pdf (*see VMW00105025*);
 - Resource Management Guide of ESX Server 3.0.1 and VirtualCenter 2.0.1 (VMW00139113), also available online at https://web.archive.org/web/20061028102342/http://www.vmware.com/pdf/vi3_esx_resource_mgmt.pdf (*see VMW00105025*);
 - The presentation by Carl Waldspurger entitled “Managing Datacenter Resources Using the VirtualCenter Distributed Resource Scheduler,” October 18-20, 2005 (DSYCC094976), also available online at <http://www.waldspurger.org/carl/papers/drs-vmworld05-slides.pdf>;
 - VMware’s invalidity analyses for the ’687 patent during the 742 Delaware Litigation, including (i) invalidity analyses in VMware’s initial invalidity contentions served on September 26, 2019, supplemental initial invalidity contentions served on October 7, October 16, and October 18, 2019, and final invalidity contentions served on November 19, 2021, and (ii) expert opinions in Dr. Jason Nieh’s June 6, 2019 declaration in opposition to Cirba’s motion for preliminary injunction and expert report dated November 29, 2019;
 - The trial testimony during the 742 Delaware Litigation explaining how the ’687 patent is invalidated by prior art, including testimony from Dr. Nieh and Dr. Waldspurger;

- *Ex Parte* Reexamination of the '687 patent, Control No. 90/014,660 (filed Jan. 22, 2021); and
- Petition for *Inter Partes Review* of the '492 patent, IPR IPR2021-00008 (filed Oct. 1, 2020).

13. Singular forms of nouns or pronouns encompass their plural forms and vice versa, and any verbs encompass all tenses.

INSTRUCTIONS

In addition to any requirements under the Federal Rules, Local Rules, and any applicable local procedures, laws, and Court orders, the following instructions apply to each Interrogatory:

1. You have a continuing duty to supplement Your responses promptly under Rule 26(e) of the Federal Rules.
2. If You object to any part of an Interrogatory, answer the unobjectionable parts and set forth the basis for Your objection to the remainder.
3. If You claim that any responsive Information or Document is privileged or otherwise protected from disclosure, state the privilege or protection claimed, the basis for Your claim, and the general subject matter of the Information.
4. If You allege that any Interrogatory is vague or ambiguous, explain what is allegedly vague or ambiguous and state the interpretation that You are using when responding.
5. These Interrogatories apply to all Information and Documents in Your possession, custody, or control, or coming into Your possession, custody, or control during this Litigation.
6. If no Documents are responsive to a particular Interrogatory, state in Your response that no responsive Documents exist.

7. Any keys, codes, explanations, manuals, or other Documents necessary for the interpretation or understanding of the Information provided or Documents produced in response to these Interrogatories shall be produced.

VMWARE'S INTERROGATORIES

INTERROGATORY NO. 36:

To the extent Cirba contends that any claim of the '492 patent or '459 patent is not unenforceable due to inequitable conduct or unclean hands, describe in detail, for each patent, all factual and legal bases supporting or refuting such allegation, including for example, all facts and circumstances relating to any decision concerning whether to disclose (or not disclose) each of the Prior Art References to the PTO during prosecution of the '492 and '459 patents, whether Cirba contends that it acted in good faith or relied on advice of counsel, and whether Cirba contends that it complied with its duty of candor to the Patent Office. Your answer also should Identify all Documents related to Your answer (by Bates numbers, if appropriate) and the three Persons most knowledgeable about the subject matter of this Interrogatory.

Dated: July 9, 2021

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CERTIFICATE OF SERVICE

I, Robert M. Vrana, hereby certify that on July 9, 2021, I caused a true and correct copy of the foregoing document to be served on the following counsel of record in the manner indicated:

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Dated: July 9, 2021

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Attorneys for VMware, Inc.

Exhibit 2

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 3

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

CIRBA INC. (d/b/a DENSIFY)
and CIRBA IP, INC.,

Plaintiffs/Counter-Defendants,

v.

VMWARE, INC.,

Defendant/Counter-Plaintiff.

C.A. No. 19-742-LPS

(Consolidated Action)

**VMWARE, INC.’S THIRD SET OF REQUESTS FOR PRODUCTION TO CIRBA INC.
AND CIRBA IP, INC. IN THE CONSOLIDATED ACTION (NO. 215)**

Under Rules 26 and 34 of the Federal Rules of Civil Procedure (“Federal Rules”), the District of Delaware Local Rules (“Local Rules”), and any applicable local procedures, laws, or Court orders, VMware, Inc. requests that Cirba Inc. and alleged Counter-Plaintiff in C.A. No. 20-272, Cirba IP, Inc., produce for inspection and copying the following documents and things (the “Requests”) and respond to the following Requests within thirty (30) days of service at the offices of Morrison & Foerster LLP, 425 Market Street, San Francisco, CA 94105.

DEFINITIONS

The following definitions apply to each instruction and Request below:

1. “You,” “Your,” and/or “Cirba” means Cirba Inc. (d/b/a Densify) and Cirba IP, Inc., including its predecessors, successors, predecessors-in-interest, successors-in-interest, subsidiaries, divisions, parents, and/or affiliates, past or present, any companies that have a controlling interest in Cirba Inc. (d/b/a Densify), and any current or former employee, officer, director, principal, agent, consultant, representative, or attorney thereof, or anyone acting on its behalf.

2. "VMware" means VMware, Inc.
3. "Identify," "identity," and "identification" mean:
 - (a) for an individual, to state the individual's full name and current or last known personal address, personal telephone number, employer, employment position, dates of employment, business address, and business telephone number and to describe the individual's employment responsibilities;
 - (b) for a Person besides a natural person (including a business or other entity), to state the Person's full name, place and date of incorporation or formation, and principal place of business and the natural persons employed by or related to that entity with knowledge of the matters for which the entity is named;
 - (c) for a Document (whether or not privilege is claimed), to state its type, date of creation, page length, drafters, authors, signatories, date of Communication, addressees, recipients, current location, current custodian, and corresponding Bates numbers for all originals and copies and to summarize its subject matter and contents briefly;
 - (d) for a Communication, to state its type and date and the parties to it, to summarize its subject matter and contents briefly, and to identify all Documents recording the Communication and any corresponding Bates numbers; and
 - (e) for an act or event, to describe it and state the circumstances that gave rise to it, the dates on or over which it occurred, the Person(s) who were involved, the Person(s) knowledgeable of it, how You learned of it, and any Document(s) memorializing or describing it.

4. "Litigation" means *Cirba Inc. (d/b/a Densify) and Cirba IP, Inc. v. VMware, Inc.*, C.A. No. 19-742-LPS, and *VMware Inc. v. Cirba Inc.*, C.A. No. 20-272-LPS (consolidated).

5. “Person(s)” means natural persons as well as business entities and other organizations and associations, including partnerships, companies, proprietorships, joint ventures, corporations, government agencies, and unincorporated associations.

6. “Document(s)” has its broadest meaning under Rule 34(a) of the Federal Rules and includes Communications, and “writing(s)” and “recording(s)” under Rule 1001 of the Federal Rules of Evidence.

7. “Communication(s)” means any transmission of information between persons by any means or medium, whether in original, draft, or copy form, whether stored in hard copy, on tape, or electronically, and whether oral or in writing, including: conversations; correspondence; electronic mails; telexes; facsimile transmissions; telecopies; recordings; telephone or message logs; notes or memoranda; and any translations.

8. “Information” means information in any form, including documentary, electronic, graphical, and tabular forms, and whether oral, written, or electronic.

9. Singular forms of nouns or pronouns encompass their plural forms and vice versa, and any verbs encompass all tenses.

10. “955 patent” means U.S. Patent No. 9,379,995.

11. “945 patent” means U.S. Patent No. 9,766,945.

12. “638 patent” means U.S. Patent No. 10,025,638.

13. “842 patent” means U.S. Patent No. 10,261,842.

14. “687 patent” means U.S. Patent No. 8,209,687.

15. “367 patent” means U.S. Patent No. 9,654,367.

16. “492 patent” means U.S. Patent No. 10,523,492.

17. “459 patent” means U.S. Patent No. 10,951,459.

18. “VMware Asserted Patents” means the ’955 patent, the ’945 patent, the ’638 patent, the ’842 patent, collectively.

19. “Cirba Asserted Patents” means the ’687 patent, the ’367 patent, the ’492 patent, and the ’459 patent, collectively.

20. “Cirba Newly Asserted Patents” means the ’492 patent and ’459 patent.

21. “Prior Art References” includes the following information as described in VMware’s Answer to Cirba’s Amended Counterclaims (D.I. 1009 at 37-82), and any other Documents or information that may subsequently be identified in connection with VMware’s inequitable conduct defense:

- *Cirba Inc. et al. v. VMware, Inc.*, Civil Action No. 19-742 (D. Del.) (“the 742 Delaware Litigation”);
- U.S. Patent No. 8,347,297 (Mateo);
- U.S. Patent Publication No. 2007/0271560 (Wahlert);
- VMware VirtualCenter Product 2006 Datasheet (VMW00067110), also available online at https://web.archive.org/web/20060621061745/http://www.vmware.com/pdf/vc_datasheet.pdf (*see* VMW00105025);
- VMware VMotion Product Datasheet (VMW00067304), also available online at https://web.archive.org/web/20060621061745/http://www.vmware.com/pdf/vc_datasheet.pdf (*see* VMW00105025);
- VMware vMotion Product Datasheet (VMW00067304), also available online at https://web.archive.org/web/20060625065949/http://www.vmware.com/pdf/vmotion_datasheet.pdf (*see* VMW00105025);

- Resource Management Guide of ESX Server 3.0.1 and VirtualCenter 2.0.1 (VMW00139113), also available online at https://web.archive.org/web/20061028102342/http://www.vmware.com/pdf/vi3_esx_resource_mgmt.pdf (see VMW00105025);
- The presentation by Carl Waldspurger entitled “Managing Datacenter Resources Using the VirtualCenter Distributed Resource Scheduler,” October 18-20, 2005 (DSYCC094976), also available online at <http://www.waldspurger.org/carl/papers/drs-vmworld05-slides.pdf>;
- VMware’s invalidity analyses for the ’687 patent during the 742 Delaware Litigation, including (i) invalidity analyses in VMware’s initial invalidity contentions served on September 26, 2019, supplemental initial invalidity contentions served on October 7, October 16, and October 18, 2019, and final invalidity contentions served on November 19, 2021, and (ii) expert opinions in Dr. Jason Nieh’s June 6, 2019 Declaration in opposition to Cirba’s motion for preliminary injunction and expert report dated November 29, 2019;
- The trial testimony during the 742 Delaware Litigation explaining how the ’687 patent is invalidated by prior art, including testimony from Dr. Nieh and Dr. Waldspurger;
- *Ex Parte* Reexamination of the ’687 patent, Control No. 90/014,660 (filed Jan. 22, 2021); and
- Petition for *Inter Partes Review* of the ’492 patent, IPR2021-00008 (filed Oct. 1, 2020).

INSTRUCTIONS

In addition to any requirements under the Federal Rules, Local Rules, and any applicable local procedures, laws, and Court orders, the following instructions apply to each Request:

1. You have a continuing duty to supplement Your responses promptly under Rule 26(e) of the Federal Rules.

2. If You object to any part of a Request, answer the unobjectionable parts and set forth the basis for Your objection to the remainder.

3. If You claim that any responsive Document is privileged or otherwise protected from disclosure, state the privilege or protection claimed, the basis for Your claim, and the general subject matter of the information. VMware does not agree that Section 1(e) of the ESI order applies to VMware's discovery requests relating to Cirba's inequitable conduct (including RFP No. 215 and Interrogatory No. 36) because Cirba filed and/or prosecuted the '492 patent and '459 patent after the filing of its complaint on April 25, 2019. If Cirba intends to rely on Section 1(e) of the ESI Order for documents dated on or after April 25, 2019 in response to these discovery requests, please state so in your response so VMware can seek relief from the Court.

4. If You allege that any Request is vague or ambiguous, explain what is allegedly vague or ambiguous and state the interpretation that You are using when responding.

5. These Requests apply to all Documents in Your possession, custody, or control, or coming into Your possession, custody, or control during this Litigation.

6. If no Documents are responsive to a particular Request, state in Your response that no responsive Documents exist.

7. Each Document is to be produced along with all drafts, without abbreviation or redaction.

8. Any keys, codes, explanations, manuals, or other Documents necessary for the interpretation or understanding of the Documents produced in response to these Requests shall be produced.

VMWARE'S REQUESTS FOR PRODUCTION

REQUEST FOR PRODUCTION NO. 215:

For each Person that VMware has accused of inequitable conduct in obtaining one or both of the Cirba Newly Asserted Patents (including Andrew D. Hillier, Tom Yuyitung, and Brett Slaney), all Documents concerning the Person's knowledge, understanding, and review of each of the Prior Art References, including the date and circumstances under which the Person first became aware of each of the Prior Art References and all subsequent knowledge and understanding of each of the Prior Art References.

Dated: September 9, 2021

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CERTIFICATE OF SERVICE

I, Robert M. Vrana, hereby certify that on September 9, 2021, I caused a true and correct copy of the foregoing document to be served on the following counsel of record in the manner indicated:

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Attorneys for Plaintiffs/Counter-Defendants

Dated: September 9, 2021

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Attorneys for VMware, Inc.

Exhibit 4

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

CIRBA INC. (d/b/a DENSIFY)
and CIRBA IP, INC.,

Plaintiffs/Counter-Defendants,

v.

VMWARE, INC.,

Defendant/Counter-Plaintiff.

Civil Action No.
1:19-cv-00742-LPS

(Consolidated)

JURY TRIAL DEMANDED

**CIRBA INC. and CIRBA IP, INC.’S OBJECTIONS AND RESPONSES
TO VMWARE, INC.’S THIRD SET OF REQUESTS FOR PRODUCTION IN THE
CONSOLIDATED ACTION (NO. 215)**

Plaintiffs/Counter-Defendants Cirba Inc. (d/b/a Densify) and Cirba IP, Inc. (collectively “Densify”), by and through their undersigned counsel, and pursuant to Federal Rules of Civil Procedure 26 and 33, the District of Delaware Local Rules (“Local Rules”), and any applicable local procedures, laws, or Court orders, hereby serve the following Objections and Responses to VMware, Inc.’s (“VMware”) Third Set of Requests for Production to Cirba Inc. and Cirba IP, Inc. in the Consolidated Action (Nos. 215) (the “Discovery Requests”).

PRELIMINARY STATEMENT

1. Densify incorporates by reference each general objection set forth below into each specific response. The specific response may repeat a general objection for emphasis or any other reason and/or may also include one or more specific objections(s). The failure to include any general objection in any specific response shall not be interpreted as a waiver of any general objection to that response.

2. Densify’s responses to VMware’s requests are made to the best of Densify’s present knowledge, information, and belief. Densify reserves the right to supplement or amend these

responses should future investigation indicate that such supplementation or amendment is necessary. Densify reserves the right to make any use of, introduce at any hearing or at trial, information or documents that are responsive to VMware's requests, but discovered subsequent to Densify's service of these responses, including, but not limited to, any information or documents obtained in discovery herein.

3. All documents will be produced subject to the Stipulated Protective Order (D.I. 111).

4. All documents will be produced subject to the Stipulated Order for Discovery, Including Discovery Of Electronically Stored Information ("ESI") For Consolidated Actions (D.I. 982). Any searches and productions for ESI documents or other documents will be conducted from August 20, 2013 forward unless indicated otherwise either herein or in ESI search terms exchanged by the parties.

DEFINITIONS

1. As used herein, "reasonable search" includes an ESI search using search terms disclosed pursuant to the relevant Court orders on data collected from designated custodians and non-custodial sources. Unless otherwise stated, a reasonable search will be limited to documents dated on or after August 20, 2013, or some other date referenced in the ESI search terms that have or will be exchanged by the parties.

2. As used herein, "VMware's First Set of Requests for Production in the Consolidated Action" means VMware, Inc.'s First Set of Requests for Production to Cirba Inc. and Cirba IP, Inc. in the Consolidated Action (Nos. 175-212), served on April 8, 2021.

GENERAL OBJECTIONS

Densify adopts and incorporates by reference the following General Objections in each of its specific answers to Counter-Plaintiff VMware's Third Set of Counterclaim Requests for

Production in the Consolidated Action (Nos. 215):

1. Densify objects to each and every request to the extent that it purports, through definitions, instructions, or otherwise, to impose burdens or duties on Densify inconsistent with, or not authorized by, the Federal Rules of Civil Procedure. In each such case, Densify declines to accept those additional burdens or duties and instead will comply with the Federal Rules of Civil Procedure.
2. Densify objects to each and every request, definition, and instruction to the extent that it calls for a legal conclusion.
3. Densify objects to each and every request, definition, and instruction to the extent that it does not identify the materials or information sought with reasonable particularity.
4. Densify objects to each and every interrogatory and request to the extent that the requests are vague, ambiguous, overbroad, unduly burdensome, do not identify with particularity the documents or information sought, or are otherwise incomprehensible.
5. Densify objects to VMware's definitions and/or use of "document(s)," "person(s)," "thing(s)," "communication(s)," "information," "material(s)," "other material," "provided to," "reviewed by," "relates to," "related to," "relate to," "relating to," "relate to any," "regarding," "reflecting," "concerning," "constituting," "showing," "referencing," "sufficient to identify," "sufficient to show," "sufficient to identify and describe," "supporting," "refuting," "evidencing," "indicating," "identify," "identifying," "described," "describing," "memorializing," "refer to," "referred to," "reviewed," "consulted," "considered," "considers," "promoted by," "derive from," "otherwise depend on," "indirectly," "interrelate," "interoperate," "reliance on," and "relied on" to the extent they require Densify to take action or to provide information that exceeds the scope of what is called for by the Federal Rules of Civil Procedure or Local Rules.

6. Densify objects to each and every request to the extent that it calls for Densify to form and then render an expert opinion, or to the extent that it requires disclosure of expert reports, analysis, findings or assessments that Densify is not yet required to disclose pursuant to the applicable rules and orders.

7. Densify objects to each request to the extent that VMware seeks documents or information that are not relevant to a claim or defense of any party or are not reasonably calculated to lead to the discovery of admissible evidence.

8. Densify objects to each request to the extent that it purports to require Densify to produce documents or information that are not within the possession, custody, or control of Densify.

9. Densify objects to each request to the extent it seeks documents already produced in this litigation and will not reproduce any such documents.

10. Densify objects to the extent that the requests call for the production of documents protected by the attorney-client privilege, the attorney work product doctrine, or any other applicable protective doctrine, privilege, or immunity. Any inadvertent production of any privileged document or information shall not constitute a waiver of any applicable objection or privilege. For purposes of responding to these demands, Densify will interpret each such request, definition, and instruction as excluding information subject to the attorney-client privilege and attorney work-product doctrine.

11. Densify objects to each request to the extent it requests documents that are subject to non-disclosure or confidentiality agreements, protective orders, or other agreements or any applicable law having privacy, confidentiality, or nondisclosure provisions, which prohibit the disclosure by Densify of the third party's information.

12. Densify objects to each request to the extent that it seeks the identification of “any,” “all,” or “each,” person, document, or information.

13. Densify objects to VMware’s definitions of “You,” “Your,” and “Cirba” on the grounds that they render the relevant topics vague, ambiguous, overbroad, and unduly burdensome. Densify will interpret these terms to refer to Cirba Inc. and Cirba IP, Inc.

14. Densify objects to VMware’s definitions and/or use of “Person(s),” “Document(s),” “Communication(s),” and “Information” on the grounds that they are vague, ambiguous, overbroad, and/or unduly burdensome. Densify further objects to each of these definitions to the extent they purport to require Densify to take action or to provide information that exceeds the scope of what is called for by the Federal Rules of Civil Procedure or Local Rules.

15. Densify objects to all requests for production to the extent that VMware seeks electronic or other information not reasonably accessible due to undue burden or cost, this includes, by way of example, data on backup tapes, disaster recovery systems, and/or temporary, transient, residual, fragmented data, audio voicemail, instant messages, social networking data, or legacy data.

16. Densify objects to each and every request, definition, and instruction as overly broad and unduly burdensome insofar as they are not limited in temporal scope or otherwise limited to a relevant time period.

RESPONSES TO REQUESTS

REQUEST FOR PRODUCTION NO. 215:

For each Person that VMware has accused of inequitable conduct in obtaining one or both of the Cirba Newly Asserted Patents (including Andrew D. Hillier, Tom Yuyitung, and Brett Slaney), all Documents concerning the Person’s knowledge, understanding, and review of each of the Prior Art References, including the date and circumstances under which the Person first became

aware of each of the Prior Art References and all subsequent knowledge and understanding of each of the Prior Art References.

RESPONSE:

Densify incorporates by reference the General Objections as if fully set forth herein. Densify objects to this request as unduly broad, unduly burdensome, and disproportionate, especially as it requests “[a]ll Documents.” Densify further objects to this request to the extent that it seeks information not in Densify’s possession, custody, or control, not maintained in the ordinary course of business or to the extent that it would require Densify to create documents that do not exist. Densify further objects to this request to the extent it seeks information that is protected by attorney-client privilege, the work product doctrine, or any other applicable privilege or doctrine. Densify further objects to this request to the extent it is duplicative of at least VMware’s First Set of Requests for Production in the Consolidated Action Nos. 198 and 202, and incorporates the relevant objections to such requests herein.

Without waiving any stated objection or date restriction, to the extent not already produced, Densify will produce responsive, relevant, non-privileged, non-work product documents created in the ordinary course of business during the relevant time period concerning prosecution of the ’492 patent and the ’459 patent, located after a reasonable search of Densify’s files.

Dated: October 12, 2021

/s/ *Kenneth L. Dorsney*
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**ATTORNEYS FOR CIRBA INC.
(D/B/A DENSIFY) AND CIRBA IP, INC.**

Exhibit 5

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

CIRBA INC. (d/b/a DENSIFY) and CIRBA IP,
INC.,

Plaintiffs/Counter-Defendants,

v.

VMWARE, INC.,

Defendant/Counter-Plaintiff.

C.A. No. 19-742-LPS

(CONSOLIDATED)

NOTICE OF SUBPOENA TO BRETT SLANEY

PLEASE TAKE NOTICE THAT, pursuant to Federal Rules of Civil Procedure 26, 30, 34, and 45 of the Federal Rules of Civil Procedure, VMware, Inc. (“VMware”) intends to serve Brett Slaney of Toronto, Ontario, Canada on or after August 26, 2021 with a Subpoena to Produce Documents and Testify at a Deposition in a Civil Action. A true and correct copy of the subpoena on Brett Slaney is attached to this notice as **Exhibit A**.

PLEASE TAKE FURTHER NOTICE that Mr. Slaney is required to produce documents and materials at Morrison & Foerster LLP, 425 Market Street, San Francisco, California 94105, or at another mutually agreeable location. After the production of documents, VMware, by and through its attorneys, will take the deposition by oral examination of Mr. Slaney—by remote audio visual conference—at 9:30 a.m. on September 10, 2021 or at such other time as is mutually agreeable to the parties and Mr. Slaney, and continuing day-to-day until completed.

This deposition will be taken before an officer authorized to administer oaths and take testimony, and the deposition may be recorded by any means that the Federal Rules of Civil

Procedure permit, including audio, video, and stenographic means, as well as means for the instant display of testimony on a computer.

Per agreement between the parties and Mr. Slaney (**Exhibit B**), Mr. Slaney will appear voluntarily for the deposition without issuance of letters rogatory. Mr. Slaney's testimony by deposition under oath in Canada will be treated as testimony under oath in a U.S. court. The deposition and any related video or transcript may be used in this litigation as if his deposition had been taken in person in the United States under Fed. R. Civ. P. 45.

Dated: August 27, 2021

OF COUNSEL:

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Attorneys for VMware, Inc.

Exhibit A

UNITED STATES DISTRICT COURT
for the
District of Delaware

Cirba Inc, (d/b/a Densify) and Cirba IP, Inc.)	
<i>Plaintiff</i>)	
v.)	Civil Action No. 19-742-LPS (Consolidated)
VMware, Inc.)	
<i>Defendant</i>)	

SUBPOENA TO TESTIFY AT A DEPOSITION IN A CIVIL ACTION

To:

Brett Slaney

CPST Intellectual Property Inc.; 181 Bay Street, Suite 2425, Toronto, Ontario, M5J 2T3, Canada

(Name of person to whom this subpoena is directed)

Testimony: YOU ARE COMMANDED to appear at the time, date, and place set forth below to testify at a deposition to be taken in this civil action. If you are an organization, you must promptly confer in good faith with the party serving this subpoena about the following matters, or those set forth in an attachment, and you must designate one or more officers, directors, or managing agents, or designate other persons who consent to testify on your behalf about these matters:

Place: Morrison & Foerster LLP, 425 Market St, San Francisco, CA 94105 (unless agreed otherwise) Deposition via remote audio video conference	Date and Time: 09/10/2021 9:30 am EDT
--	--

The deposition will be recorded by this method: videographic and/or stenographic means

Production: You, or your representatives, must also bring with you to the deposition the following documents, electronically stored information, or objects, and must permit inspection, copying, testing, or sampling of the material: See Attachment A.

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 08/27/2021

CLERK OF COURT

OR



Signature of Clerk or Deputy Clerk

Attorney's signature

The name, address, e-mail address, and telephone number of the attorney representing (name of party) VMware, Inc., who issues or requests this subpoena, are:

Diek Van Nort, Morrison & Foerster LLP, 425 Market St, San Francisco, CA 94105, dvannort@mofo.com, 415-268-7000

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

AO 88A (Rev. 12/20) Subpoena to Testify at a Deposition in a Civil Action (Page 2)

Civil Action No. 19-742-LPS (Consolidated)

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for (*name of individual and title, if any*) _____
on (*date*) _____.

I served the subpoena by delivering a copy to the named individual as follows: _____

on (*date*) _____; or

I returned the subpoena unexecuted because: _____

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also
tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of

\$ _____.

My fees are \$ _____ for travel and \$ _____ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

Server's signature

Printed name and title

Server's address

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)

(c) Place of Compliance.

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
 - (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
- (i) is a party or a party's officer; or
 - (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
- (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) Appearance Not Required. A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) Objections. A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

(i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.

(ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

(A) When Required. On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

- (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
- (iv) subjects a person to undue burden.

(B) When Permitted. To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

(i) disclosing a trade secret or other confidential research, development, or commercial information; or

(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.

(C) Specifying Conditions as an Alternative. In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

(i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and

(ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information:

(A) Documents. A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) Form for Producing Electronically Stored Information Not Specified. If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.

(C) Electronically Stored Information Produced in Only One Form. The person responding need not produce the same electronically stored information in more than one form.

(D) Inaccessible Electronically Stored Information. The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) Information Withheld. A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:

(i) expressly make the claim; and

(ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) Information Produced. If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

ATTACHMENT A

DEFINITIONS

The words and phrases used herein shall have the meanings ascribed to them under the Federal Rules of Civil Procedure (“Federal Rules”) and the Local Rules of the United States District Court for the District of Delaware (“Local Rules”). In addition, the words and phrases set forth below shall have the meaning set forth below whenever used in any Request or Topic.

The following definitions apply to the Instructions, Requests, and Topics below, regardless of capitalization, and are incorporated into each Request or Topic as if fully set forth therein.

1. “You,” “Your,” “Yours” means Mr. Brett Slaney, or persons and representatives acting on behalf of Mr. Slaney.
2. “Cirba” means Cirba Inc. and Cirba IP, Inc., including, without limitation, its predecessors, successors, predecessors-in-interest, successors-in-interest, subsidiaries, divisions, parents, and/or affiliates, past or present, any companies that have a controlling interest in Plaintiffs, and any current or former employee, officer, director, principal, agent, consultant, representative, or attorney thereof, or anyone acting on their behalf.
3. “Defendant” and/or “VMware” means VMware, Inc.
4. “CPST” means CPST Intellectual Property Inc.
5. “Blakes” means Blake, Cassels & Graydon LLP.
6. “PTO” means the United States Patent and Trademark Office.
7. ““492 patent” means U.S. Patent No. 10,523,492.
8. ““459 patent” means U.S. Patent No. 10,951,459.
9. ““687 patent” means U.S. Patent No. 8,209,687.

10. “Patents at Issue” means the ’492 patent, the ’459 patent, and the ’687 patent.

11. “Prior Art References at Issue” includes the following information as

described in VMware’s Answer to Cirba’s Amended Counterclaims (**Exhibit C** at 37-82), and any other Documents or information that may subsequently be identified in connection with VMware’s inequitable conduct defense:

- *Cirba Inc. et al. v. VMware, Inc.*, Civil Action No. 19-742 (D. Del.) (“the 742

Delaware Litigation”);

- U.S. Patent No. 8,347,297 (“Mateo”);

- U.S. Patent Publication No. 2007/0271560 (“Wahlert”);

- VMware VirtualCenter Product 2006 Datasheet (VMW00067110), also

available online at

https://web.archive.org/web/20060621061745/http://www.vmware.com/pdf/vc_datasheet.pdf (see VMW00105025);

- VMware VMotion Product Datasheet (VMW00067304), also available online at

https://web.archive.org/web/20060625065949/http://www.vmware.com/pdf/vmotion_datasheet.pdf (see VMW00105025);

- Resource Management Guide of ESX Server 3.0.1 and VirtualCenter 2.0.1

(VMW00139113), also available online at

https://web.archive.org/web/20061028102342/http://www.vmware.com/pdf/vi3_esx_resource_mgmt.pdf (see VMW00105025);

- The presentation by Carl Waldspurger entitled “Managing Datacenter Resources Using the VirtualCenter Distributed Resource Scheduler,” October 18-20, 2005

(DSYCC094976), also available online at

<http://www.waldspurger.org/carl/papers/drs-vmworld05-slides.pdf>;

- VMware’s invalidity analyses for the ’687 patent during the 742 Delaware Litigation, including (i) invalidity analyses in VMware’s initial invalidity contentions served on September 26, 2019, supplemental initial invalidity contentions served on October 7, October 16, and October 18, 2019, and final invalidity contentions served on November 19, 2021, and (ii) expert opinions in Dr. Jason Nieh’s June 6, 2019 declaration in opposition to Cirba’s motion for preliminary injunction and expert report dated November 29, 2019;
- The trial testimony during the 742 Delaware Litigation explaining how the ’687 patent is invalidated by prior art, including testimony from Dr. Nieh and Dr. Waldspurger;
- *Ex Parte* Reexamination of the ’687 patent, Control No. 90/014,660 (filed Jan. 22, 2021); and
- Petition for *Inter Partes Review* of the ’492 patent, IPR2021-00008 (filed Oct. 1, 2020).

12. “Prior Art” has the same meaning as used in 35 U.S.C. § 101 *et seq.*, and includes any patent, printed publication, knowledge, use, sale or offer for sale, or other act or event defined in 35 U.S.C. §§ 102–103, taken individually or in combination.

13. “Document(s)” shall be interpreted in the broadest possible sense and, at a minimum, shall be synonymous in meaning with and equal in scope to the usage of this term in Rule 34(a) of the Federal Rules of Civil Procedure, and includes Communication(s) and anything that would be a “writing” or “recording” as defined by Rule 1001 of the Federal

Rules of Evidence.

14. “Timenotes” means records containing quantities of time, narratives, and/or corresponding metadata, including metadata identifying date(s) and timekeeper(s), which describe tasks performed for a given matter. This includes, but is not limited to, records of time entries from time tracking software, as well as manually generated substitutes or counterparts.

15. “Litigation” means the consolidated action, *Cirba Inc. (d/b/a Densify) and Cirba IP, Inc. v. VMware, Inc.*, Case No. 19-742-LPS (Consolidated), pending in the District of Delaware.

16. “Subpoena” means the Subpoena to Testify at a Deposition in a Civil Action issues to You in August of 2021 in connection with the Litigation.

17. “Thing(s)” means any tangible item.

18. “Communication(s)” means any transmission of information in any context or situation by or between Persons by any means or medium, whether in original, draft, or copy form, whether stored in hard copy, electronically, digitally, or on tape, and whether oral or in writing, including but not limited to: conversations; correspondence; electronic mails; telexes; facsimile transmissions; telecopies; recordings; telephone or message logs; text messages (SMS or MMS); instant messages; notes or memoranda; and any translations.

19. “Person” or “Entity” and their plural forms include, without limitation, natural persons, corporations, companies, law firms, partnerships, joint ventures, associations,

20. “Relate,” “relating to,” “refer,” and “referring to” are used in their broadest possible sense and include all matters comprising, constituting, containing, concerning, embodying, reflecting, involving, discussing, describing, analyzing, identifying, stating,

dealingwith, or in any way pertaining to, for each discovery request, whichever definition makes the discovery request most inclusive.

21. "And" and "or" shall each be construed disjunctively or conjunctively as necessary in order to bring within the scope of the discovery request all responses that mightotherwise be construed to be outside its scope.

22. "Any" shall be construed to include the word "all" and "all" shall be construed toinclude the word "any" as necessary in order to bring within the scope of the discovery request all responses that might otherwise be construed to be outside its scope.

23. "Include" or "including" means including but not limited to and should not beread to limit the scope of any particular discovery request, but merely as illustrative of some information that would be responsive.

24. "Information" means information in any form, including documentary, electronic, graphical, and tabular forms, and whether oral, written, or electronic.

25. The singular form of a noun or pronoun shall be considered to include within itsmeaning the plural form of a noun or pronoun so used, and vice versa; the use of the masculineform of a pronoun shall be considered to include also within its meaning the feminine form of the pronoun so used, and vice versa; and the use of any tense of any verb shall be considered toinclude within its meaning all other tenses of the verb so used.

INSTRUCTIONS

1. You must respond to these Requests for Documents in accordance and compliance with the Federal Rules, the Local Rules, and any relevant order by the Court.

2. These Requests apply to all Documents in Your possession, custody, or control atthe present time, or coming into Your possession, custody, or control prior to or during the

pendency of the above-captioned lawsuit. If You know of the existence, past or present, of any Documents or Things requested below, but are unable to produce such Documents or Things because they are not presently in Your possession, custody, or control, You shall so state and shall identify such Documents or Things, and the person who has possession, custody, or control of the Documents or Things.

3. If no Documents are responsive to a particular Request, You are to state in Your response that no responsive Documents exist.

4. If You withhold any Document or portion thereof in response to any of the Requests set forth below on grounds of privilege, work product immunity, or for any other reason, then for each Document, Communication, or portion thereof so withheld, you must produce a log that includes the following: (a) the type of Document (e.g., letter, email, notebook, sketch, computer entry, drawing, publication, report, memorandum, contact, etc.); (b) its title; (c) its date; (d) a summary of the subject matter and its content; (e) the name, address, and employer at the time of preparation of the Persons who authored, drafted, or prepared it; (f) the name, address, and employer at the time of dissemination of the Persons to whom it was directed, circulated, or copied, or who had access thereto; and (g) the grounds on which the Document is being withheld (e.g., "attorney-client privilege," "attorney work product," etc.).

5. If You contend that a portion of a Document contains information that is immune from discovery, then produce the Document with the allegedly immune portion redacted therefrom and describe the redacted portion in a privilege log pursuant to the instructions in paragraph 4 above.

6. These Requests seek all responsive Documents in their original language, and,

if such original language is not English, these Requests also seek all English-language translations that may exist for any such Documents.

7. Each Document is to be produced along with all drafts, without abbreviation or redaction.

8. Any keys, codes, explanations, manuals, or other Documents necessary for the interpretation or understanding of the Documents produced in response to these Requests shall be produced.

9. In the event that You object to any Document Request or any part of a Document Request, identify the part to which you object, state the objection(s) with specificity, and provide a response to the remaining unobjectionable part.

10. In the event that You object to any Request on the ground that it is overbroad and/or unduly burdensome for any reason, respond to that Request as narrowed to the least extent necessary, in Your judgment, to render said Request not overbroad/unduly burdensome and state specifically the extent to which You have narrowed that Request for purposes of Your response and the factual basis for Your conclusion.

11. In the event that You object to any Request on the ground that it is vague and/or ambiguous, identify the particular words, terms or phrases that are asserted to make such Request vague and/or ambiguous and assume a reasonable meaning, state what the assumed meaning is, and respond to the Request according to the assumed meaning.

REQUESTS FOR PRODUCTION

REQUEST FOR PRODUCTION NO. 1:

All Documents and Things related to the role of each attorney, patent agent, or consultant involved in the preparation or prosecution of the Patents at Issue, as well as each individual's knowledge of the Prior Art References at Issue and when each individual first learned of each of the Prior Art References at Issue.

REQUEST FOR PRODUCTION NO. 2:

All Documents and Things relating to Your knowledge of the Prior Art References at Issue, including when You first learned of each of the Prior Art References at Issue.

REQUEST FOR PRODUCTION NO. 3:

All Documents concerning Communications with Cirba relating to the Prior Art References at Issue or the Patents at Issue.

REQUEST FOR PRODUCTION NO. 4:

Documents related to Your, Blakes's, CPST's, and/or Cirba's search for and identification of Prior Art to the Patents at Issue.

REQUEST FOR PRODUCTION NO. 5:

All Documents relating to any decision concerning whether or how to disclose (or whether not to disclose) any piece of Prior Art, including each of the Prior Art References at Issue, to the PTO during prosecution of the '492 patent and/or the '459 patent.

REQUEST FOR PRODUCTION NO. 6:

Documents sufficient to accurately and completely show the reasons why the PTO was not informed during prosecution of the applications for the '492 patent and/or the '459 patent of the Prior Art References at Issue.

REQUEST FOR PRODUCTION NO. 7:

Documents sufficient to accurately and completely show the general practices and procedures that You have followed with respect to the duty of disclosure set forth in 37 C.F.R. § 1.56.

REQUEST FOR PRODUCTION NO. 8:

All Documents showing whether You, Blakes, CPST, and/or Cirba acted in good faith in prosecuting the '492 patent and/or the '459 patent.

REQUEST FOR PRODUCTION NO. 9:

Documents related to any requests by You, Blakes, and/or CPST to Cirba for Prior Art or relevant information to the Patents at Issue, and guidance provided by You, Blakes, and/or CPST to Cirba regarding identifying relevant Prior Art.

REQUEST FOR PRODUCTION NO. 10:

All Communications between Cirba, You, Blakes, and/or CPST, on the one hand, and the PTO, on the other, related to the preparation or prosecution of the Patents at Issue.

REQUEST FOR PRODUCTION NO. 11:

Documents sufficient to accurately and completely describe the terms of engagement between Cirba and You, Blakes, and/or CPST with respect to patent prosecution matters, including prosecution of the Patents at Issue.

REQUEST FOR PRODUCTION NO. 12:

Your calendar entries regarding scheduled communications with any Person relating to the Patents at Issue.

REQUEST FOR PRODUCTION NO. 13:

Your invoices relating to the Patents at Issue.

REQUEST FOR PRODUCTION NO. 14:

Your timenotes for matters relating to the Patents at Issue.

REQUEST FOR PRODUCTION NO. 15:

All Communications regarding the Subpoena.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

CIRBA INC. D/B/A DENSIFY
and CIRBA IP, INC.,

Plaintiffs,

v.

VMWARE, INC.,

Defendant.

Civil Action No. 19-742 (LPS)

JURY TRIAL DEMANDED

STIPULATED PROTECTIVE ORDER

WHEREAS, Plaintiffs Cirba Inc. (d/b/a Densify) and Cirba IP, Inc. (collectively “Densify”) and Defendant VMware, Inc. (“VMware”) expect discovery in the above-captioned action, including any appeals therefrom (this “Litigation”), to encompass certain information that may constitute proprietary, confidential, commercially sensitive, trade secrets, and/or other confidential research, development, business, or commercial information. If such information is disclosed or disseminated in an unprotected manner, it may cause substantial harm to Plaintiffs, Defendant, and/or nonparties, including loss of competitive advantage, loss of existing business, and loss of business opportunities. Accordingly, the Parties, by and between their representative counsel, have stipulated and agreed, pursuant to Rule 26(c) of the Federal Rules of Civil Procedure and subject to the approval of the Court, that the following Stipulated Protective Order (the “Protective Order”) shall govern the handling of Discovery Material in the Litigation.

DEFINITIONS

1. **“Affiliate”** means any Third Party that directly or indirectly through one or more intermediaries controls, or is controlled by, or is under common control with, a Party to this

Litigation.

2. **“CHALLENGING PARTY”** means a Party or Third Party that challenges the designation of information or items under this Protective Order.

3. **“CONFIDENTIAL”** means information that constitutes, contains, reveals, or reflects trade secrets or other confidential research, development, business, or commercial information within the meaning of Fed. R. Civ. P. 26(c), including but not limited to: including material which reflects or contains any of the following: (i) confidential, proprietary, or commercially sensitive information; (ii) any information which is not generally known and which the Producing Party would not normally reveal to Third Parties or would cause Third Parties to maintain in confidence; or (iii) confidential information of a Third Party that the Producing Party is bound by a separate confidentiality agreement or court order to maintain in confidence and that the Producing Party is permitted to produce in this Litigation, including scientific and technical information; financial, budgeting and/or accounting information; information about existing and potential customers; marketing and other business strategies, decisions, or negotiations; personnel compensation, evaluations, and other employment information; and includes such confidential and proprietary information about a Third Party, including parents, subsidiaries, and/or other Affiliates. Provisions of this Protective Order relating to CONFIDENTIAL information shall be understood to encompass any information derived from, as well as testimony and oral conversation related to, CONFIDENTIAL information, and all copies, excerpts, and summaries thereof.

4. **“HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY”** means highly sensitive CONFIDENTIAL information or items, disclosure of which to another Party or Third Party would create a substantial risk of serious harm that could not be avoided by less restrictive

means. Such information or items may include, for example:

- (a) information concerning proposed or actual research and development, whether or not such research and development has resulted in a commercial product that has been disclosed to the public;
- (b) business, marketing, or strategic proposals or plans; customer, vendor, and employee lists, whether targeted or actual; and
- (c) financial information, such as that related to expenses, costs, pricing, sales, or profits;
- (d) highly sensitive design, development, technical, or manufacturing information;
- (e) licensing agreements and communications; and
- (f) alleged trade secrets, i.e., information, including a formula, pattern, compilation, program, device, method, technique, or process, that
 - i. derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and
 - ii. is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

5. **“HIGHLY CONFIDENTIAL – SOURCE CODE”** means highly sensitive Highly Confidential Attorney’s Only native source code (including computer code, comments on code and revision histories, “include” files, make files, link files, and other human-readable files used in the generation, building, or compiling of software or firmware), algorithms, pseudocode, or descriptions of such code, files, algorithms, or pseudocode that are substantially equivalent to the actual code, disclosure of which to another Party or Third Party would create a substantial

risk of serious harm that could not be avoided by less restrictive means.

6. **“CONFIDENTIAL Discovery Material”** means Discovery Material that a Producing Party designates as CONFIDENTIAL pursuant to the terms of this Protective Order. **“HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES-ONLY Discovery Material”** means Discovery Material that a Producing Party designates as HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY pursuant to the terms of this Protective Order. **“HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material”** means Discovery Material that a Producing Party designates as “HIGHLY CONFIDENTIAL – SOURCE CODE.”

7. **“DESIGNATING PARTY”** means a Party or Third Party designating Discovery Material as “CONFIDENTIAL,” “HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY,” or “HIGHLY CONFIDENTIAL – SOURCE CODE.”

8. **“Discovery Material”** means all documents, testimony, pleadings, exhibits, and all other material or information produced or disclosed in this Litigation, including disclosures, contentions, responses to requests for production of documents and/or things, answers to interrogatories, responses to requests for admissions, documents and things made available for inspection, deposition testimony, expert testimony and reports, and all other disclosures made and discovery taken pursuant to the Federal Rules of Civil Procedure and any order of this Court, including Third Party discovery pursuant to Rule 45, matters in evidence, and any other information hereafter furnished, directly or indirectly, by or on behalf of any Party, Third Party, or witness in connection with this Litigation. This Protective Order and its protections shall apply to all Discovery Material.

9. **“Expert”** means a person with specialized knowledge or experience in a matter pertinent to this Litigation, including any associates or analysts working under the supervision of

the Expert, with disclosure only to the extent necessary to perform such work, who has been retained by a Party or its Outside Counsel to serve as an expert witness or as a consultant in this Litigation who, at the time of retention, is not an officer, director, or employee of a Party or an Affiliate and is not anticipated to become an officer, director, or employee of a Party or an Affiliate. Nothing in this Protective Order purports to alter in any way the requirements for offering testimony under Fed. R. Evid. 703, or to define the term “expert” for purposes other than those addressed in this Protective Order.

10. **“Designated In-house Counsel”** means an attorney who is an employee of a Party or an Affiliate to whom disclosure of HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY Discovery Material is reasonably necessary for the purposes of this litigation.

11. **“Outside Counsel”** means any attorney from a law firm that has made a formal appearance as counsel of record for a Party in this Litigation and who is not an employee of a Party or an Affiliate.

12. **“Party”** means any party to this Litigation, including all of its officers, directors, employees, consultants, retained experts, and Outside Counsel (and their support staffs).

13. **“Densify”** means Cirba Inc. (d/b/a Densify) and Cirba IP, Inc.

14. **“VMware”** means VMware, Inc.

15. **“Producing Party”** means any Party or any Third Party who produces or otherwise discloses, whether through formal or informal means, Discovery Material in this Litigation.

16. **“Professional Vendor”** means a person or entity that provides litigation support services (e.g., photocopying, audio or video recording, translating, preparing exhibits or demonstrations, and organizing, storing, or retrieving data in any form or medium; jury

consulting including mock jurors, mock trial coordination) and their employees and subcontractors.

17. **“Protective Order”** means this Stipulated Protective Order.

18. **“Protected Material”** means any Discovery Material that is designated as “CONFIDENTIAL,” “HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY,” or “HIGHLY CONFIDENTIAL – SOURCE CODE.”

19. **“Receiving Party”** means any Party that receives Discovery Material produced or otherwise disclosed by any Producing Party.

20. **“Third Party”** means a person or entity that is not a Party.

SCOPE

21. The protections conferred by this Protective Order cover not only Protected Material (as defined above), but also (1) any information copied or extracted from Protected Material; (2) all copies, excerpts, summaries, or compilations of Protected Material; and (3) any testimony, conversations, or presentations by Parties or their Counsel that might reveal Protected Material. However, the protections conferred by this Protective Order do not cover the following information: (a) any information that is in the public domain at the time of disclosure to a Receiving Party or becomes part of the public domain after its disclosure to a Receiving Party as a result of publication not involving a violation of this Protective Order, including becoming part of the public record through trial or otherwise; or (b) any information known to the Receiving Party prior to the disclosure or obtained by the Receiving Party after the disclosure from a source who obtained the information lawfully and under no obligation of confidentiality to the Designating Party. Any use of Protected Material at trial shall require a separate agreement or order.

DURATION

22. Even after final disposition of this litigation, the confidentiality obligations imposed by this Protective Order shall remain in effect until a Designating Party agrees otherwise in writing or a court order otherwise directs. Final disposition shall be deemed to be the later of (1) dismissal of all claims and defenses in this Litigation, with or without prejudice, and (2) final judgment after the completion and exhaustion of all appeals, re-hearings, remands, trials, or reviews of this Litigation, including the time limits for filing any motions or applications for extension of time pursuant to applicable law.

DESIGNATION

23. Any Producing Party may designate Discovery Material as CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE in accordance with this Protective Order if such party in good faith believes that such Discovery Material contains CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE information.

24. For information in documentary form (e.g., paper or electronic documents, but excluding transcripts of depositions or other pretrial or trial proceedings), designation in conformity with this Protective Order requires that the Producing Party affix the legend CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE to each page that contains protected material, or include the designation CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE in the metadata produced with any native-format electronic documents, or, if not practicable, as otherwise agreed by the Parties.

25. A Party or Third Party that makes original documents or materials available for

inspection need not designate them for protection until after the inspecting Party has indicated which material it would like copied and produced. During the inspection and before the designation, all of the material made available for inspection shall be deemed HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, except any source code made available for inspection shall be deemed HIGHLY CONFIDENTIAL – SOURCE CODE during the inspection and before the designation. After the inspecting Party has identified the documents it wants copied and produced, the Producing Party must determine which documents, or portions thereof, qualify for protection under this Protective Order. Then, before producing the specified documents, the Producing Party must affix the appropriate legend (CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE) to each page that contains Protected Material, or, if not practicable, as otherwise agreed by the Parties. There will be no waiver of confidentiality, or any privilege or immunity, by the inspection of Discovery Material before it is copied and marked pursuant to this Protective Order. Inspection of Discovery Material by any Party shall be conducted by persons eligible under Paragraphs 37, 38, and 44 below.

26. Documents and things produced or made available for inspection may be subject to redaction, in good faith by the Producing Party, of information that is subject to the attorney-client privilege, work-product immunity, or any other applicable privilege or immunity. Each such redaction, regardless of size, shall be clearly labeled “Redacted – Privileged.” This Paragraph shall not be construed as a waiver of any Party’s right to seek disclosure of redacted information. The parties will separately agree to provisions for clawing back privileged documents and for preparing privilege logs.

27. Information revealed during a deposition upon oral or written examination under

Fed. R. Civ. P. 30 shall be treated as HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY for thirty (30) days (as calculated by Fed. R. Civ. P. 6) following receipt of the final transcript by Outside Counsel for the Producing Party, but not thereafter unless, before the thirty (30) day period has expired, Outside Counsel for the Producing Party notifies Outside Counsel for the Receiving Party in writing that the Discovery Material set forth in the transcript is CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE. Counsel for any Party or Third Party also may designate the transcript or portions thereof to be CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material during the deposition. The appropriate legend described in Paragraph 24 shall be placed on the front of any deposition transcript (and, if recorded, any copies of the recording) containing CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material.

28. Any pleading, brief, declaration, affidavit, expert report, or other filing that contains, describes, or discusses CONFIDENTIAL Discovery Material, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY Discovery Material, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material shall be filed under seal pursuant to the requirements of D. Del. LR 5.1.3 and the Court’s CM/ECF procedures. The filing Party must include on the cover page of the brief or other filing a descriptive legend in substantially the following format or another suitable legend: “CONFIDENTIAL – FILED UNDER SEAL,” “HIGHLY CONFIDENTIAL (ATTORNEYS’ EYES ONLY) – FILED UNDER SEAL,” “HIGHLY CONFIDENTIAL (SOURCE CODE) – FILED UNDER SEAL.” Outside Counsel for the Party filing papers containing, describing, or discussing CONFIDENTIAL, HIGHLY

CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material shall be responsible for providing appropriately redacted copies of the filed document to the Court in accordance with Paragraph (G)(1) of the United States District Court for the District of Delaware’s Revised Administrative Procedures Governing Filing and Service by Electronic Means, Revised May, 2019. If the filing contains the CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material of a party who did not file the document, within three (3) days from the date of a filing made under seal, Outside Counsel for the filing Party or filing Third Party shall deliver to Outside Counsel for the non-filing Party or Parties a proposed public version of the under seal filing, which shall include the filing Party’s proposed redactions of any CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material. Within three (3) days after receipt of the proposed public version, Outside Counsel for the non-filing Party shall provide any additional redactions it believes appropriate. Redacted versions of papers filed under seal may be made publicly available provided that (a) all CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, and HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material is redacted; and (b) such redacted versions are clearly marked “Public Version,” and clearly identify each place where information or exhibits have been redacted or deleted.

CHALLENGING CONFIDENTIALITY DESIGNATIONS

29. Any Party may challenge a designation of confidentiality at any time. Unless a prompt challenge to a Designating Party’s confidentiality designation is necessary to avoid foreseeable, substantial unfairness, unnecessary economic burdens, or a significant disruption or delay of the Litigation, a Party does not waive its right to challenge a confidentiality designation

by electing not to mount a challenge promptly after the original designation is disclosed.

30. The Challenging Party shall initiate the dispute resolution process by providing written notice of each designation it is challenging and describing the basis for each challenge. To avoid ambiguity as to whether a challenge has been made, the written notice must recite that the challenge to confidentiality is being made in accordance with this specific paragraph of the Protective Order. The parties shall attempt to resolve each challenge in good faith and must begin the process by conferring in-person or telephonically within seven (7) days of the date of service of notice. In conferring, the Challenging Party must explain the basis for its belief that the confidentiality designation was not proper and must give the Designating Party an opportunity to review the designated material, to reconsider the circumstances, and, if no change in designation is offered, to explain the basis for the chosen designation. A Challenging Party may proceed to the next stage of the challenge process only if it has engaged in this meet and confer process first or establishes that the Designating Party is unwilling to participate in the meet and confer process in a timely manner.

31. If the Parties cannot resolve a challenge without court intervention, the Challenging Party may file and serve a motion, or otherwise invoke the Court's discovery dispute resolution process, challenging a confidentiality designation within fourteen (14) days of the initial notice of challenge or within seven (7) days of the parties agreeing that the meet and confer process will not resolve their dispute, whichever is later.

32. The burden of persuasion in any such challenge proceeding shall be on the Designating Party. Frivolous challenges and those made for an improper purpose (e.g., to harass or impose unnecessary expenses and burdens on other parties) may expose the Challenging Party to sanctions. All Parties shall continue to afford the material in question the level of protection

to which it is entitled under the Producing Party's designation until the Court rules on the challenge.

ACCESS TO AND USE OF PROTECTED MATERIAL

33. CONFIDENTIAL Discovery Material, HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY Discovery Material, and HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material produced by a Party or Third Party may be used by the Receiving Party only for purposes of this Litigation. Nothing in this Protective Order precludes a Producing Party from using or disseminating its own Discovery Material, including CONFIDENTIAL Discovery Material, HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY Discovery Material, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material, for purposes other than this Litigation.

34. At the deposition of any fact witness, unless agreed to by the Producing Party, such witness may be shown CONFIDENTIAL Discovery Material, HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY Discovery Material, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material only if the witness is a current employee of the Producing Party or the CONFIDENTIAL Discovery Material, HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY Discovery Material, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material reveals on its face that the witness authored the Discovery Material or received the Discovery Material in the ordinary course of business and outside the context of this Litigation.

35. At the deposition of any corporate representative designated pursuant to Fed. R. Civ. P. 30(b)(6) to testify on behalf of a Party on a particular topic or subject area, unless agreed to by the Producing Party, such witness may be shown CONFIDENTIAL Discovery Material, HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY Discovery Material, or HIGHLY

CONFIDENTIAL – SOURCE CODE Discovery Material only if the Producing Party is the Party being deposed pursuant to Fed. R. Civ. P. 30(b)(6) or the CONFIDENTIAL Discovery Material, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY Discovery Material, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material reveals on its face that an employee or agent of the Party being deposed pursuant to Fed. R. Civ. P. 30(b)(6) authored the Discovery Material or received the Discovery Material in the ordinary course of business and outside the context of this Litigation.

36. Third parties may designate as CONFIDENTIAL or HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY deposition transcripts of their witnesses and any Discovery Material they produce, whether voluntarily or by subpoena, to the same extent and in the same manner as Parties and any such CONFIDENTIAL Discovery Material shall be treated by the Parties in the same manner as the CONFIDENTIAL Discovery Material produced by a Party. Third Parties shall have the same rights and obligations under this Protective Order as parties and may move the Court to enforce the provisions of this Protective Order.

DISCLOSURE OF CONFIDENTIAL DISCOVERY MATERIAL

37. Unless otherwise directed by the Court or authorized in writing by the Producing Party, CONFIDENTIAL Discovery Material may be disclosed by the Receiving Party only to the following persons:

- (a) The officers, directors, and employees of the Receiving Party to whom disclosure is reasonably necessary for this litigation, including in-house counsel, paralegals, eDiscovery teams, and secretarial staff;
- (b) Any Outside Counsel;
- (c) Any insurers of the Receiving Party to whom disclosure is reasonably necessary

for the purposes of this Litigation who have been identified to the Producing Party and who agree to be bound by this Protective Order;

(d) Support personnel for Outside Counsel, such as law clerks, paralegals, secretaries, and clerical staff, assisting with this Litigation under the supervision of Outside Counsel;

(e) Analysts, scientific advisors, and patent agents regularly employed by Outside Counsel so long as they are subject to the same restrictions as Outside Counsel;

(f) Contract attorneys retained by a Party's Outside Counsel for the sole purpose of assisting with document review in this Litigation and who shall be subject to the same restrictions as Outside Counsel;

(g) Any Expert who is expressly retained by any Outside Counsel to assist in this Litigation, with disclosure only to the extent necessary to perform such work, who have signed the "Acknowledgement and Declaration to be Bound" attached as Exhibit A and as to whom the procedures set forth in Paragraph 40 have been followed;

(h) Support personnel for Experts, such as secretaries and clerical staff, assisting with this Litigation under the supervision of an Expert;

(i) Any interpreter, court reporter, or other shorthand reporter or typist who is translating, recording, or transcribing documents or testimony in connection with this Litigation;

(j) Professional Vendors;

(k) Personnel of the Court and all appropriate courts of appellate jurisdiction; and

(l) Any other person with the prior written consent of the Producing Party or by order of this Court.

38. Unless otherwise directed by the Court or authorized in writing by the Producing Party, HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY Discovery Material may be

disclosed by the Receiving Party only to the following persons, who shall be subject to the limitations set forth in the Section of this Order entitled “Prosecution Bar”:

- (a) Any Outside Counsel;
- (b) Up to two (2) individuals who have been identified to the Producing Party as a Party’s Designated In-House Counsel prior to receiving HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY Discovery Material and who agree to be bound by this Protective Order;
- (c) Any insurers of the Receiving Party to whom disclosure is reasonably necessary for the purposes of this Litigation, who have been identified to the Producing Party and who agree to be bound by this Protective Order, and as to whom the procedures in paragraph 41 have been followed prior to receiving HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY Discovery Material;
- (d) Support personnel for Outside Counsel, such as law clerks, paralegals, secretaries, and clerical staff, assisting with this Litigation under the supervision of Outside Counsel;
- (e) Analysts, scientific advisors, and patent agents regularly employed by Outside Counsel so long as they are subject to the same restrictions as Outside Counsel;
- (f) Contract attorneys retained by a Party’s Outside Counsel for the sole purpose of assisting with document review in this Litigation and who shall be subject to the same restrictions as Outside Counsel;
- (g) Any Expert who is expressly retained by any Outside Counsel to assist in this Litigation, including any associates or analysts working under the supervision of the Expert, with disclosure only to the extent necessary to perform such work, who have signed the “Acknowledgement and Declaration to be Bound” attached as Exhibit A and as to whom the

procedures set forth in Paragraph 40 have been followed;

- (h) Support personnel for Experts, such as secretaries and clerical staff, assisting with this Litigation under the supervision of an Expert;
- (i) Any interpreter, court reporter, or other shorthand reporter or typist who is translating, recording, or transcribing documents or testimony in connection with this Litigation;
- (j) Professional Vendors;
- (k) Personnel of the Court and all appropriate courts of appellate jurisdiction; and
- (l) Any other person requested with the prior written consent of the Producing Party or by order of this Court who has signed the “Acknowledgement and Declaration to be Bound” attached as Exhibit A.

39. CONFIDENTIAL Discovery Material or HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY Discovery Material shall not be disclosed to persons described in Paragraph 37(c), (g), (h), or (l) or Paragraph 38(c), (g), (h), or (l) unless and until such person has executed an acknowledgement in the form attached as Exhibit A. Either Outside Counsel or Designated In-House Counsel must maintain a copy of the executed Exhibit A for each such person during the Litigation and for one year thereafter.

40. Unless otherwise ordered by the Court or agreed to in writing by the Producing Party, before a Party can disclose to an Expert described above in Paragraphs 37(g) and 38(g) any information or item of the Producing Party that has been designated CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE, Outside Counsel for the Receiving Party: (a) shall serve a notice on the Producing Party identifying such individual by name and including an up-to-date curriculum vitae (“CV”) or equivalent resume disclosing the individual’s employment history, past or

present relationship with any of the Parties and Affiliates, an identification of the individual's employment and consulting relationships for the past five (5) years (to the extent such information is not disclosed on the individual's curriculum vitae), all cases in which the individual has testified in a deposition or a trial in the past five (5) years, an indication of whether Outside Counsel for the Receiving Party intends to show the individual HIGHLY CONFIDENTIAL – SOURCE CODE or HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY Discovery Material, and an executed acknowledgment from the individual to whom the disclosure is to be made, in the form of Exhibit A attached hereto; and (b) shall abide by the provisions of Paragraph 41. The Party must also serve the individual's executed "Acknowledgement and Declaration to be Bound" attached as Exhibit A.

41. If a Producing Party objects to the proposed disclosure to such individual within five (5) days of disclosure, the Parties shall meet and confer in-person or telephonically in good faith within three (3) days from receipt of the timely written objection to resolve the concerns giving rise to the objection. Any such objection must set forth in detail the grounds on which it is based. If the Parties are unable to reach agreement regarding such disclosure, the objecting Party will have five (5) days from the date of the meet and confer to seek relief from the Court. The burden shall be on the objecting Party to demonstrate to the Court why such individual should not be permitted to receive CONFIDENTIAL and HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY Discovery Material under the Protective Order. CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY, and HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material shall not be disclosed to such individual pending the Court's resolution of the dispute. If relief is not sought from the Court within that time, the objection shall be deemed withdrawn. The foregoing time periods may be

extended or shortened by agreement of the Parties or ordered by the Court.

42. The recipient of any CONFIDENTIAL Discovery Material, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY Discovery Material, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material that is provided under this Protective Order (including any copies or excerpts made thereof) shall maintain such Discovery Material in a secure and safe area and shall exercise reasonable and proper care with respect to the storage, custody, use, and/or dissemination of such Discovery Material. The recipient of CONFIDENTIAL Discovery Material, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY Discovery Material, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material produced in electronic form shall maintain such Discovery Material on a secure, password-protected computer, drive, or server with access restricted to persons authorized under Paragraphs 37, 38, and 44, respectively.

SOURCE CODE

43. To the extent production of source code becomes necessary in this case, a Producing Party may designate source code as HIGHLY CONFIDENTIAL – SOURCE CODE if it comprises or includes confidential, proprietary, or trade secret source code.

44. Discovery Material designated as HIGHLY CONFIDENTIAL – SOURCE CODE shall be subject to all of the protections afforded to HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY Discovery Material, and may be disclosed only to the following persons, who shall be subject to the limitations set forth in the Section of this Order entitled “Prosecution Bar”:

(a) the Receiving Party’s Outside Counsel in this Litigation, as well as employees of said Outside Counsel to whom it is reasonably necessary to disclose the information for this

Litigation;

(b) Support personnel for Outside Counsel, such as law clerks, paralegals, secretaries, and clerical staff, assisting with this Litigation under the supervision of Outside Counsel, with disclosure only to the extent necessary to perform such work;

(c) Experts who are expressly retained by the Receiving Party's Outside Counsel to assist in this Litigation, including any associates or analysts working under the supervision of the Expert, with disclosure only to the extent necessary to perform such work, who have signed the "Acknowledgement and Declaration to be Bound" attached as Exhibit A and as to whom the procedures set forth in Paragraphs 40 and 41 have been followed;

(d) Support personnel for Experts, such as secretaries and clerical staff, assisting with this Litigation under the supervision of an Expert, with disclosure only to the extent necessary to perform such work;

(e) Any interpreter, court reporter, or other shorthand reporter or typist who is translating, recording, or transcribing documents or testimony in connection with this Litigation;

(f) Personnel of the Court and all appropriate courts of appellate jurisdiction; and

(g) Any other person requested with the prior written consent of the Producing Party or by order of this Court who has signed the "Acknowledgement and Declaration to be Bound" attached as Exhibit A.

45. The Receiving Party shall identify in writing to the Producing Party any individual who will be conducting the inspection or will be present during the inspection of the source code at least 48 hours prior to the first time any such individual is inspecting the source code and at least 24 hours prior to any subsequent times.

46. An electronic copy of source code or executable code (collectively, "Source

Code") shall be made available for inspection on two stand-alone computers. Any Source Code produced in discovery shall be made available for inspection, in its native form and native directory structure as organized and kept in the ordinary course of business allowing it to be reasonably reviewed and searched, during normal business hours (9:00 a.m. to 5:00 p.m. local time, Monday-Friday, excluding holidays) or at other mutually agreeable times, at a mutually agreed upon location. The Receiving Party shall not copy, remove, or otherwise transfer any portion of the Source Code in any way, including copying by handwriting or onto any recordable media or recordable device. Except as otherwise provided herein, no electronic devices, including cellular phones, PDAs, cameras, and voice recorders, will be permitted in the secure location. The Receiving Party's Source Code reviewers will be entitled to take notes relating to the Source Code, such as directories/filenames into the notes, but not verbatim copies of the source code itself. Such notes will be treated the same as original printouts.

47. The stand-alone, secured computers shall run a reasonably current version of the Microsoft Windows operating system in a secured, climate-controlled (reasonable temperature and humidity level) room without Internet access or network access to other computers (the "Source Code Computer"). The Source Code Computer shall have at least one screen with resolution of no less than 1920 x 1200, a mouse and keyboard. If requested by the Receiving Party, the Producing Party shall load any reasonable software analysis tools provided by the Receiving Party (provided that installation or use of such software does not violate other provisions of this Protective Order), including: Grep, Understand, Visual Slick Edit, Source-Navigator, PowerGrep, ExamDiff Pro, Beyond Compare, Araxis Merge, Adobe Reader, Microsoft Office Viewer(s), Notepad++, and/or Cygwin, provided that the Receiving Party provide the Producing Party with at least four (4) days' notice prior to the intended use of public

software tools, or four (4) days after provision of license(s) to any non-public software to the Producing Party. The Receiving Party and its experts may need to utilize certain automated forensic tools as part of the Source Code review procedure. Such tools may be used to compare Source Code. The Parties will work together to agree on acceptable forensic tools and procedures. The Receiving Party is responsible for complying with any licensing terms for such software analysis and forensic tools, including paying for any Third-Party costs or fees associated with providing those tools. The Producing Party may visually monitor the activities of the Receiving Party's representatives during any source code review, but only to ensure that there is no unauthorized recording, copying, or transmission of the source code.

48. The Receiving Party may request paper copies of portions of source code that are reasonably necessary for the preparation of court filings, pleadings, expert reports, or other papers, or for deposition or trial, but shall not request paper copies for the purposes of reviewing the source code other than electronically in the first instance. In the event that the Receiving Party believes there is a need to print more than fifteen (15) contiguous pages of a file, or more than a total of 100 printed pages of a file, the burden shall be on the Receiving Party to demonstrate that such printed portions are no more than is reasonably necessary for a permitted purpose and not merely printed for the purposes of review and analysis elsewhere. A "page" for the purposes of this limitation will be defined as an 8.5 x 11" sheet of paper with 12-point font. The Producing Party shall provide all such source code in paper form on watermarked paper including bates numbers and the label "HIGHLY CONFIDENTIAL - SOURCE CODE." Counsel for the Producing Party shall provide two (2) copies of such original printouts to counsel for the Receiving Party within two (2) business days of being notified that such original printouts have been made absent an objection by the Producing Party that the production exceeds the page

limits set forth in this Protective Order. The Producing Party may challenge the amount of Source Code requested in hard copy form pursuant to the dispute resolution procedure and timeframes set forth in Section “CHALLENGING CONFIDENTIALITY DESIGNATIONS” whereby the Producing Party is the “Challenging Party” and the Receiving Party is the “Designating Party” for purposes of dispute resolution.

49. The Receiving Party shall maintain a record of any individual who has inspected any portion of the Source Code in electronic or paper form. Outside Counsel for the Receiving Party shall maintain any printed portions of the Source Code in a secured, locked area. The Receiving Party shall not create any copy without the Producing Party’s consent, including handwritten, electronic, or other images of the paper copies and shall not convert any of the information contained in the paper copies into any electronic format.

50. Notwithstanding the foregoing, an Expert reviewing the Source Code may make hand-written notes identifying the portions of the Source Code for which the Receiving Party may request paper copies. To the greatest extent practicable, such notes will consist only of references to file names, line numbers, function names, or other information that does not consist of the actual contents of the source code.

51. For depositions involving source code, the Receiving Party may bring the copies of printed source code. In the event a Source Code Computer is needed for the deposition, at least five (5) days before the date of the deposition, the Receiving Party shall notify the Producing Party about its wishes to use a Source Code Computer at the deposition. The Receiving Party shall make available the Source Code Computer after such a request. Source code may not be shown to anyone at a deposition who is not authorized to access the code under this Protective Order, and it shall not be attached or made an exhibit to the deposition transcript.

To the greatest extent practicable, references to source code during a deposition or in submissions to the Court shall be to file names, line numbers, function names, or other information that does not reveal the actual contents of the source code.

52. Nothing in this Protective Order shall be construed as a representation or admission that source code is properly discoverable in this action, or to obligate any Party to produce any source code. The Source Code provisions included herein are the minimum restrictions on source code production and are without waiver to the inclusion of additional limitations once the scope of source code discovery is clarified.

PRODUCING A THIRD PARTY'S PROTECTED MATERIALS IN THIS LITIGATION

53. In the event that a Party is required, by a valid discovery request, to produce a Third Party's confidential information in its possession, and the Party is subject to an agreement restricting the ability to produce the Third Party's confidential information, then the Party shall:

- (a) promptly notify in writing the requesting Party and the Third Party that some or all of the information requested is subject to a confidentiality agreement with a Third Party;
- (b) promptly provide the Third Party with a copy of the Protective Order and the relevant discovery request(s); and
- (c) promptly make the information requested available for inspection by the Third Party.

54. If the Third Party fails to seek a protective order or other relief from this Court within 14 days of receiving the notice and accompanying information, the Third Party's confidential information responsive to the discovery request shall be produced, with an appropriate confidentiality designation. If the Third Party timely seeks a protective order, the Third Party's confidential information responsive to the discovery request shall not be produced before a determination by the

Court. Absent a Court order to the contrary, the Third Party shall bear the burden and expense of seeking protection in this Court of its Protected Material.

PROSECUTION BAR

55. Absent written consent from the Producing Party, any Outside Counsel, or any other person who reviews HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material of another Party, shall not be involved directly or indirectly (including communicating or advising) in the prosecution of patents or patent applications relating to technologies disclosed in U.S. Patent Nos. 8,209,687 and 8,793,679, i.e., optimizing virtual machines across multiple physical machines in data centers before any foreign or domestic agency, including the United States Patent and Trademark Office on behalf of a patentee. The purpose of this prosecution bar is to prohibit and prevent any person affiliated with a Receiving Party from using HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material of a Producing Party to influence the drafting or amendment of the claims of any existing or future patent so that the patents read on the Producing Party’s past, present, or future products.

56. To avoid any doubt, “prosecution” as used in this section does not include representing a Party challenging a patent before a domestic or foreign agency (including, but not limited to, any post-grant proceedings). Nor does “prosecution” as used in this section include representing a patent-holder in a reissue protest, supplemental examination proceeding, post-grant review, *ex parte* reexamination, or *inter partes* review, so long as the proceeding is not initiated by the patent-holder itself for any of its own patents, and so long as the individuals involved in the representation have no involvement in and do not advise regarding drafting, editing, or approving claim language. This Prosecution Bar shall begin when access to HIGHLY

CONFIDENTIAL – ATTORNEYS’ EYES ONLY or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material is first received by the affected individual and shall end one (1) year after access to HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material has ended for the affected individual.

EXPORT CONTROL

57. Disclosure of Protected Material shall be subject to all applicable laws and regulations relating to the export of technical data contained in such Protected Material, including the release of such technical data to foreign persons or nationals in the United States or elsewhere. The Producing Party shall be responsible for identifying any such controlled technical data, and the Receiving Party shall take measures necessary to ensure compliance.

58. The Parties are not currently aware of any legal restrictions or other limitations implicated by the provision of this Protective Order making source code and certain potential deponents available in Canada (as opposed to the United States). If the parties learn of any such legal restrictions or other limitations that would impede VMware’s ability to use such evidence in this Litigation as if it had been provided, taken, or otherwise obtained in the United States, Densify agrees to waive any such restrictions or limitations that are waivable and, as part of this Protective Order, the Court accepts such waiver. To the extent the parties learn of any non-waivable restrictions or limitations that would impede VMware’s ability to use such evidence in this Litigation as if it had been provided, taken, or otherwise obtained in the United States, Densify agrees to make such evidence available in the United States. The parties also agree that nothing in this Protective Order constitutes a concession by Densify or VMware that its source code is relevant or discoverable in this Litigation.

EXPERT DISCOVERY

59. In accordance with Federal Rule of Civil Procedure 26(b), communications and exchanges between counsel and Experts (including testifying Experts), including those made in preparing drafts of expert reports and declarations, are not discoverable unless the Expert relies on any such communication to support his or her opinion. In addition, draft expert reports and declarations are not discoverable. Communications and exchanges between counsel and non-testifying Expert witnesses are not discoverable. Notes made by Experts for purposes of this Litigation are not discoverable. Neither Party shall seek non-discoverable Expert communications, exchanges, notes, or draft reports or declarations.

NO WAIVER OF PRIVILEGE BY VIRTUE OF INADVERTENT DISCLOSURE

60. The inadvertent production by a Party of Discovery Material subject to the attorney-client privilege, work-product protection, or any other applicable privilege or protection will not waive the applicable privilege and/or protection, including in this Litigation or in any other federal or state proceeding. This provision constitutes an Order under Federal Rule of Evidence 502(d). Upon discovery of the inadvertent production of Discovery Material over which a privilege or protection is claimed, a Producing Party may promptly request the return of such inadvertently produced Discovery Material. Upon a request from any Producing Party who has inadvertently produced Discovery Material that it believes is privileged and/or protected, the Receiving Party shall immediately destroy or return such Discovery Material and all copies to the Producing Party and certify compliance.

FAILURE TO DESIGNATE

61. The failure by a Producing Party to designate Discovery Material as CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY

CONFIDENTIAL – SOURCE CODE shall not be a waiver of such designation provided that the Producing Party that fails to make such designation informs the Receiving Party that such Discovery Material is CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE promptly after the failure to designate first became known to the Producing Party. The failure by a Producing Party to designate Discovery Material as CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE shall not preclude a Party from seeking relief from the Court at a later date requesting imposition of such designation or challenging the propriety thereof. The Producing Party shall reproduce the Discovery Material with the correct confidentiality designation within seven (7) days upon its notification to the Receiving Party. Upon receiving the Discovery Material with the correct confidentiality designation, the Receiving Party shall return or securely destroy all Discovery Material that was not designated properly and certify compliance.

62. In the event of disclosure of CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material to any person not authorized to such access under this Protective Order, the Party responsible for having made such disclosure, and each Party with knowledge thereof, shall immediately inform Outside Counsel for the Party whose CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material has been disclosed of all known relevant information concerning the nature and circumstances of the disclosure. The Party responsible for improperly disclosing such CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material shall also promptly take all reasonable

measures to retrieve the improperly disclosed CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material and to ensure that no further or greater unauthorized disclosure and/or use thereof is made.

RETURN/DESTRUCTION OF MATERIALS

63. Not later than seventy-five (75) days (as calculated by Fed. R. Civ. P. 6) after the final deposition of this Litigation as defined in the Section of this Order entitled “DURATION”, all CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material, including all copies thereof, shall be returned to the Producing Party or destroyed, such election to be made by the Receiving Party, except that each Outside Counsel may retain their emails and any attachments relating to this case, and one (1) archival copy of all papers filed with the Court, expert reports, discovery responses, transcripts of testimony and exhibits, correspondence, mediation briefs, and their own work product containing such Discovery Material, and provided that such Outside Counsel and their respective employees shall not disclose any Party’s CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material contained therein to any person or entity except pursuant to a written agreement with the Producing Party or as otherwise provided in this Protective Order and shall maintain the safeguards set forth in Paragraph 33. Not later than ninety (90) days (as calculated by Fed. R. Civ. P. 6) after the termination of this Litigation, the Party receiving any CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material shall certify in writing that all such material has been returned or destroyed.

MISCELLANEOUS PROVISIONS

64. This Protective Order is without prejudice to the right of any Party to seek further or additional protection of information for which the protection of this Protective Order is not believed by any Party to be adequate. Nothing in this Protective Order shall be deemed to bar or preclude any Producing Party from seeking such additional protection, including, without limitation, an order that certain information may not be discovered at all.

65. The entry of this Protective Order shall not be construed as a waiver of any right to object to the furnishing of information in response to discovery, and except as expressly provided, shall not relieve any party of the obligation of producing information in the course of discovery.

66. If at any time CONFIDENTIAL Discovery Material, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material of a Producing Party is subpoenaed from a Receiving Party or is the subject of a discovery request directed to a Receiving Party in any proceeding before any court or arbitral, administrative, or legislative body, the person to whom the subpoena or other request is directed shall immediately give written and email notice pursuant to the provisions of Paragraph 69 and shall provide the Producing Party with an opportunity to object to the production of such materials. If the Producing Party does not seek a protective order within fifteen (15) days (as calculated by Fed. R. Civ. P. 6) of the date written notice is given, the Receiving Party to whom the subpoena or other request is directed may produce, on or after the date set for production in the subpoena or other request, but not prior to the end of the fifteen (15) day notice period, such material in response thereto, under a protective order with confidentiality provisions equal to or more restrictive than those of this Protective Order.

67. Other Proceedings. By entering this Protective Order and limiting the disclosure of information in this case, the Court does not intend to preclude another court from finding that information may be relevant and subject to disclosure in another case. Any person or party subject to this Protective Order who becomes subject to a motion to disclose another party's information designated as CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE pursuant to this Protective Order shall promptly notify that party of the motion so that the party may have the opportunity to appear and be heard on whether that information should be disclosed.

68. Outside Counsel shall have the right to exclude from depositions, other than the deponent and the reporter, any person who is not authorized under this Protective Order to receive CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material. Such right of exclusion shall be applicable only during periods of examination or testimony directed to CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material.

69. All notices during this Litigation required by this Protective Order are to be made by email to a Party's Outside Counsel (including, if available, to Outside Counsel's service distribution email address designated for this Litigation), and all notices subsequent to the termination of Litigation are to be made by email and U.S. mail to a Party's Outside Counsel and the office of the Party's general counsel, if known. The date by which a Party receiving notice shall respond or otherwise take action shall be computed from the date of service as calculated by Fed. R. Civ. P. 5. Any of the notice requirements herein may be waived in whole or in part, but only in writing signed by Outside Counsel for the Producing Party.

70. Nothing in this Protective Order shall bar or otherwise restrict any Outside Counsel from rendering advice to his or her client with respect to this Litigation and, in the course thereof, relying in a general way upon his or her examination of CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material produced or exchanged in this Litigation: provided, however, that in rendering such advice and in otherwise communicating with a person not permitted access to CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material under this Protective Order, the Outside Counsel shall not disclose the contents of CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material produced by any other Party or Third Party.

71. Execution of this Protective Order shall not constitute a waiver of the right of any Party to claim in this Litigation or otherwise that any document, communication, or any portion thereof (a) is privileged or otherwise non-discoverable or (b) is not admissible in evidence in this Litigation or any other proceeding.

72. Each person who receives CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material agrees to be subject to the jurisdiction of this Court for the purpose of any proceedings relating to the performance under, compliance with, or violation of this Protective Order.

73. This Protective Order may be amended by the agreement of Outside Counsel for the Parties in the form of a written Stipulated Amended Protective Order signed by each Party’s Outside Counsel and filed with the Court for approval. The Court retains the right to allow

disclosure of any subject or CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material covered by this Protective Order or to modify or vacate this Protective Order at any time in the interest of justice.

74. Neither the termination of this Litigation nor the termination of employment of any person with access to any CONFIDENTIAL, HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY, or HIGHLY CONFIDENTIAL – SOURCE CODE Discovery Material shall relieve any individual from the obligation of maintaining the confidentiality of such information in accordance with this Protective Order. The Court shall retain jurisdiction to enforce the terms of the Protective Order after final termination of this Litigation.

Dated: July 26, 2019

Respectfully submitted,

/s/ Kenneth L. Dorsney

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YOUNG CONAWAY STARGATT &
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Attorneys for VMware, Inc.

SO ORDERED this _____ day of _____, 2019.

Chief, United States District Court Judge

EXHIBIT A

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

CIRBA INC. D/B/A DENSIFY
and CIRBA IP, INC.,

Plaintiffs,

v.

VMWARE, INC.,

Defendant.

Civil Action No. 1:19-cv-00742-LPS

JURY TRIAL DEMANDED

ACKNOWLEDGEMENT AND DECLARATION TO BE BOUND

I, _____ [print or type full name], of _____
[print or type full address], declare under penalty of perjury that I have read in its entirety and
understand the Protective Order that was issued by the United States District Court for the
District of Delaware on _____ [date] in the above-captioned Litigation.

I have received and carefully read the Protective Order in this Litigation and understand
its provisions. Specifically, I understand that I am obligated, under order of the Court, to hold in
confidence and not to disclose the contents of anything marked “CONFIDENTIAL,” “HIGHLY
CONFIDENTIAL – OUTSIDE ATTORNEYS’ EYES ONLY,” or “HIGHLY CONFIDENTIAL
– SOURCE CODE,” except as permitted by the Protective Order. According to the restrictions
of Section (“ACCESS TO AND USE OF PROTECTED MATERIAL”) of the Protective Order,
I will use Discovery Material, including CONFIDENTIAL Discovery Material, HIGHLY
CONFIDENTIAL – OUTSIDE ATTORNEYS’ EYES ONLY Discovery Material, or HIGHLY
CONFIDENTIAL – SOURCE CODE Discovery Material, or information derived therefrom,

solely for purposes relating to the above-captioned Litigation. I will never use such Discovery Material or information derived therefrom, directly or indirectly, in competition with the Producing Party nor will I permit others to do so. I will not knowingly provide strategic or operation consulting for companies that directly compete with a Party in the relevant area relating to technologies disclosed in U.S. Patent Nos. 8,209,687 and 8,793,679, i.e., optimizing virtual machines across multiple physical machines in data centers, such as Apptio / Fitted Cloud / Cloudability, Cloudamize, CloudCheckr, Densify / Cirba, DivvyCloud, Flexera / Rightscale, HPE Consumption Explorer / Cloud Cruiser, Metricly, Microsoft Azure Cost Management / Cloudyn, Nutanix Beam, Opsani, ParkMyCloud, Spotinst, Turbonomic, and VMware / CloudHealth, for one (1) year after my access to Discovery Material ends. In addition to the foregoing, I understand that I must abide by all of the provisions of the Protective Order.

I hereby submit to the jurisdiction of this Court for the purpose of enforcement of the Protective Order in this Litigation. I declare under penalty of perjury of the laws of the United States that the foregoing is true and correct.

Respectfully submitted,

Date:

Signature

Exhibit B

From: Connor Houghton
To: Li, Yue; Wesley White; MoFo VMware Cirba; Gaza, Anne Shea; Vrana, Robert; Wilson, Samantha
Cc: RJ Densify; Dorsney, Kenneth L.; Hitch, Cortlan S.
Subject: RE: Cirba Inc. et al v. VMware, Inc., Case 1:19-cv-00742-LPS (D. Del.) - Deposition of Prosecution Counsel
Date: Wednesday, August 11, 2021 8:05:20 AM

External Email

Lily,

Mr. Slaney has agreed to appear voluntarily for a deposition without issuance of letters rogatory. We agree that Mr. Slaney's deposition can be treated as though it were taken in the United States in this litigation.

Thank you,
Connor

Connor S. Houghton
REICHMAN JORGENSEN LEHMAN & FELDBERG LLP
1710 Rhode Island Ave., NW
12th Floor
Washington, D.C. 20036
(202) 894-7315

From: Li, Yue <YLi@mofo.com>
Sent: Friday, August 6, 2021 2:29 PM
To: Connor Houghton <choughton@reichmanjorgensen.com>; Wesley White <wwhite@reichmanjorgensen.com>; MoFo_VMware_Cirba <MoFo_VMware_Cirba@mofo.com>; Gaza, Anne Shea <agaza@ycst.com>; Vrana, Robert <RVrana@ycst.com>; Wilson, Samantha <SWilson@ycst.com>
Cc: RJ_Densify <RJ_Densify@reichmanjorgensen.com>; Dorsney, Kenneth L. <KDorsney@morrisjames.com>; Hitch, Cortlan S. <CHitch@morrisjames.com>
Subject: RE: Cirba Inc. et al v. VMware, Inc., Case 1:19-cv-00742-LPS (D. Del.) - Deposition of Prosecution Counsel

[EXTERNAL]
Connor,

Thanks for the update. Please let us know by Wednesday.

Thanks,
Lily

From: Connor Houghton <choughton@reichmanjorgensen.com>
Sent: Wednesday, August 4, 2021 2:22 PM
To: Li, Yue <YLi@mofo.com>; Wesley White <wwhite@reichmanjorgensen.com>;
MoFo_VMware_Cirba <MoFo_VMware_Cirba@mofo.com>; Gaza, Anne Shea <agaza@ycst.com>;
Vrana, Robert <RVrana@ycst.com>; Wilson, Samantha <SWilson@ycst.com>
Cc: RJ_Densify <RJ_Densify@reichmanjorgensen.com>; Dorsney, Kenneth L.
<KDorsney@morrisjames.com>; Hitch, Cortlan S. <CHitch@morrisjames.com>
Subject: RE: Cirba Inc. et al v. VMware, Inc., Case 1:19-cv-00742-LPS (D. Del.) - Deposition of
Prosecution Counsel

External Email

Lily,

We are still conferring with Mr. Slaney and expect to get back to you next week on this.

Thank you,
Connor

Connor S. Houghton
REICHMAN JORGENSEN LEHMAN & FELDBERG LLP
1710 Rhode Island Ave., NW
12th Floor
Washington, D.C. 20036
(202) 894-7315

From: Li, Yue <YLi@mofo.com>
Sent: Tuesday, August 3, 2021 4:33 PM
To: Wesley White <wwhite@reichmanjorgensen.com>; MoFo_VMware_Cirba
<MoFo_VMware_Cirba@mofo.com>; Gaza, Anne Shea <agaza@ycst.com>; Vrana, Robert
<RVrana@ycst.com>; Wilson, Samantha <SWilson@ycst.com>
Cc: RJ_Densify <RJ_Densify@reichmanjorgensen.com>; Dorsney, Kenneth L.
<KDorsney@morrisjames.com>; Hitch, Cortlan S. <CHitch@morrisjames.com>
Subject: RE: Cirba Inc. et al v. VMware, Inc., Case 1:19-cv-00742-LPS (D. Del.) - Deposition of
Prosecution Counsel

[EXTERNAL]

Wesley,

Following up on our email below regarding the deposition of Mr. Slaney.

When do you expect to let us know?

Thanks,
Lily

From: Wesley White <wwhite@reichmanjorgensen.com>
Sent: Tuesday, July 27, 2021 3:00 PM
To: Li, Yue <YLi@mofo.com>; MoFo_VMware_Cirba <MoFo_VMware_Cirba@mofo.com>; Gaza, Anne Shea <agaza@ycst.com>; Vrana, Robert <RVrana@ycst.com>; Wilson, Samantha <SWilson@ycst.com>
Cc: RJ_Densify <RJ_Densify@reichmanjorgensen.com>; Dorsney, Kenneth L. <KDorsney@morrisjames.com>; Hitch, Cortlan S. <CHitch@morrisjames.com>
Subject: RE: Cirba Inc. et al v. VMware, Inc., Case 1:19-cv-00742-LPS (D. Del.) - Deposition of Prosecution Counsel

External Email

Lily,

We've reached out to Mr. Slaney concerning VMware's inquiries and will let you know when we have an update.

Regards,

Wesley L. White | 646.921.1471 | REICHMAN JORGENSEN LEHMAN & FELDBERG LLP

From: Li, Yue <YLi@mofo.com>
Sent: Monday, July 19, 2021 2:24 PM
To: RJ_Densify <RJ_Densify@reichmanjorgensen.com>; Dorsney, Kenneth L. <KDorsney@morrisjames.com>; Hitch, Cortlan S. <CHitch@morrisjames.com>
Cc: MoFo_VMware_Cirba <MoFo_VMware_Cirba@mofo.com>; Gaza, Anne Shea <agaza@ycst.com>; Vrana, Robert <RVrana@ycst.com>; Wilson, Samantha <SWilson@ycst.com>
Subject: Cirba Inc. et al v. VMware, Inc., Case 1:19-cv-00742-LPS (D. Del.) - Deposition of Prosecution Counsel

[EXTERNAL]

Counsel,

VMware intends to depose Cirba's prosecution counsel Brett Slaney regarding prosecution of the '492 and '459 patents.

We understand that Mr. Slaney is located in Canada. To avoid burdening the Court with discovery requests, please let us know by July 26, 2021 if Cirba and Mr. Slaney agree to the following:

- Mr. Slaney will appear for deposition voluntarily without letters rogatory; and
- Mr. Slaney's testimony by deposition under oath in Canada will be admissible as testimony under oath in a U.S. court and may be used in this litigation as if his deposition was taken in person in the United States under Rule 45, including, but not limited to, use of any related videotape or transcript.

Regards,
Lily

LILY LI

Associate | Morrison & Foerster LLP
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Exhibit C

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

CIRBA INC. (d/b/a DENSIFY),

Plaintiff/Counter-Defendant,

v.

VMWARE, INC.,

Defendant/Counter-Plaintiff.

C.A. No. 19-742-LPS

(Consolidated)

JURY TRIAL DEMANDED

**VMWARE, INC.’S ANSWER
TO CIRBA’S AMENDED COUNTERCLAIMS**

VMware, Inc. (“VMware”) responds to the counterclaims in the Amended Answer and Counterclaims to Plaintiff VMware’s Complaint (D.I. 992 at 34-89) filed on May 3, 2021 (the “Counterclaims”) by Cirba Inc. (d/b/a Densify) (“Cirba”). VMware denies all allegations in the Counterclaims except for those specifically admitted below.¹

NATURE OF THE ACTION

1. In answer to Paragraph 1 of the Counterclaims, VMware denies that Cirba is a “quintessential start-up success story” and has, “[t]hrough innovation and years of hard work, . . . earned recognition for having set the standard in the industry for cloud and virtual infrastructure optimization.” VMware lacks information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 1 of the Counterclaims and therefore denies them.

2. In answer to Paragraph 2 of the Counterclaims, VMware denies that Cirba is an “industry leader.” VMware lacks information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 2 of the Counterclaims and therefore denies them.

¹ To the extent Cirba Inc. is found to have properly joined Cirba IP, Inc. as a Counter-Plaintiff for its Counterclaims, VMware’s answer in its entirety applies to Cirba IP, Inc. as well.

3. In answer to Paragraph 3 of the Counterclaims, VMware denies that, “[f]or years, [Cirba’s] products have led the industry in optimization, competing effectively based on its innovations and foundational patent protection.” VMware lacks information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 3 of the Counterclaims and therefore denies them.

4. VMware denies the allegations of Paragraph 4 of the Counterclaims.

5. VMware denies the allegations of Paragraph 5 of the Counterclaims.

6. In answer to Paragraph 6 of the Counterclaims, VMware admits that “99% of *Fortune 1000* companies reportedly are VMware customers.” VMware lacks information sufficient to form a belief as to the truth of Cirba’s allegation that it “has invested years and millions of dollars to develop and commercialize products embodying its intellectual property,” and therefore denies it. VMware denies the remaining allegations of Paragraph 6 of the Counterclaims.

7. In answer to Paragraph 7 of the Counterclaims, VMware lacks information sufficient to form a belief as to the truth of Cirba’s allegation that it “has not licensed its patents to competitors,” and therefore denies it. The remaining allegations of Paragraph 7 of the Counterclaims state legal conclusions, which do not require an admission or denial. But if a response is required, VMware lacks information sufficient to form a belief as to their truth and therefore denies them.

8. VMware denies the allegations of Paragraph 8 of the Counterclaims.

9. The allegations of Paragraph 9 of the Counterclaims state legal conclusions, which do not require an admission or denial. But if a response is required, VMware denies them.

THE PARTIES

10. VMware denies that “Cirba, Inc. is the exclusive licensee of the patents asserted in this case.” (*See* D.I. 752; D.I. 946 at 1-6.) VMware lacks information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 10 of the Counterclaims and therefore denies them.

11. VMware denies that Cirba IP, Inc. “has exclusively licensed [the patents asserted in this case] to Cirba, Inc.” (*See* D.I. 752; D.I. 946 at 1-6.) VMware lacks information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 11 of the Counterclaims and therefore denies them.

12. VMware admits the allegations of Paragraph 12 of the Counterclaims.

JURISDICTION AND VENUE

13. In answer to Paragraph 13 of the Counterclaims, VMware admits that the Counterclaims purport to bring a civil action for patent infringement. The remaining allegations of Paragraph 13 of the Counterclaims state legal conclusions, which do not require an admission or denial. But if a response is required, VMware denies them.

14. The allegations of Paragraph 14 of the Counterclaims state legal conclusions, which do not require an admission or denial. But if a response is required, VMware denies them.

15. In answer to Paragraph 15 of the Counterclaims, VMware does not contest that venue is proper in this Court for purposes of this action. VMware admits that its customers have included the University of Delaware, Alliant Credit Union, Rent-A-Center, Cardinal Health, and the Make-A-Wish Foundation of America. VMware denies the remaining allegations of Paragraph 15 of the Counterclaims.

16. In answer to Paragraph 16 of the Counterclaims, VMware admits that it offers for sale and sells products and services in the State of Delaware and does not contest that this Court

has personal jurisdiction over it for purposes of this action. VMware denies that its products and services infringe. The remaining allegations of Paragraph 16 of the Counterclaims state legal conclusions, which do not require an admission or denial. But if a response is required, VMware denies them.

BACKGROUND

1. Densify And Its Technology

17. VMware lacks information sufficient to form a belief as to the truth of the allegations of Paragraph 17 of the Counterclaims and therefore denies them.

18. In answer to Paragraph 18 of the Counterclaims, VMware admits that some companies deploy IT infrastructure, including computing, storage, and networking equipment, on their premises and that servers can run workloads. VMware lacks information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 18 of the Counterclaims and therefore denies them.

19. In answer to Paragraph 19 of the Counterclaims, VMware admits that companies can deploy significant equipment and many physical servers. VMware lacks information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 19 of the Counterclaims and therefore denies them.

20. In answer to Paragraph 20 of the Counterclaims, VMware admits that virtualization can refer to the process of creating a software-based or virtual representation of something, such as virtual applications, servers, storage, and networks. VMware also admits that virtualization may be able to create efficiencies, depending on the context. VMware lacks information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 20 of the Counterclaims and therefore denies them.

21. In answer to Paragraph 21 of the Counterclaims, VMware admits that a virtual machine can be created within a computing environment and that multiple virtual machines may be able to exist in a host, depending on the context. VMware also admits that a hypervisor can be used to create and run virtual machines. VMware lacks information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 21 of the Counterclaims and therefore denies them.

22. In answer to Paragraph 22 of the Counterclaims, VMware admits that a virtual machine is sometimes referred to as a “guest,” the computing environment in which it is created is sometimes referred to as a “host,” and multiple virtual machines may be able to exist in a host, depending on the context. VMware denies the remaining allegations of Paragraph 22 of the Counterclaims.

23. VMware admits that “containers” can refer to a technology for deploying applications and that Kubernetes is an open-source platform for using containers. VMware denies the remaining allegations of Paragraph 23 of the Counterclaims.

24. In answer to Paragraph 24 of the Counterclaims, VMware admits that a group of hosts is sometimes referred to as a “cluster” and that it may be possible to manage the resources of the hosts within the cluster. VMware denies the remaining allegations of Paragraph 24 of the Counterclaims.

25. VMware denies the allegations of Paragraph 25 of the Counterclaims.

26. VMware denies the allegations of Paragraph 26 of the Counterclaims.

27. VMware denies the allegations of Paragraph 27 of the Counterclaims.

28. VMware lacks information sufficient to form a belief as to the truth of the allegations of Paragraph 28 of the Counterclaims and therefore denies them.

29. VMware lacks information sufficient to form a belief as to the truth of the allegations of Paragraph 29 of the Counterclaims and therefore denies them.

30. VMware lacks information sufficient to form a belief as to the truth of the allegations of Paragraph 30 of the Counterclaims and therefore denies them.

31. VMware lacks information sufficient to form a belief as to the truth of the allegations of Paragraph 31 of the Counterclaims and therefore denies them.

32. VMware lacks information sufficient to form a belief as to the truth of the allegations of Paragraph 32 of the Counterclaims and therefore denies them.

B. VMware And Its Technology

33. In answer to Paragraph 33 of the Counterclaims, VMware admits that it provides cloud computing and virtualization software and services; that it was founded in 1998; that it entered the server market in 2001; that it is a leader in virtualization software; that it has expanded its offerings; and that it is known for its innovation of the hypervisor. VMware denies the remaining allegations of Paragraph 33 of the Counterclaims.

34. In answer to Paragraph 34 of the Counterclaims, VMware admits that it innovated server virtualization. VMware denies the remaining allegations of Paragraph 34 of the Counterclaims.

35. In answer to Paragraph 35 of the Counterclaims, VMware admits that it has been successful in the marketplace and that it has acquired other companies with innovative technology. VMware denies the remaining allegations of Paragraph 35 of the Counterclaims.

36. In answer to Paragraph 36 of the Counterclaims, VMware admits that in 2008, Paul Maritz took over for former VMware President and CEO Diane Greene. VMware admits that Paul Maritz was a former Microsoft employee and former President of EMC's Cloud

Computing Division. VMware denies the remaining allegations of Paragraph 36 of the Counterclaims.

37. In answer to Paragraph 37 of the Counterclaims, VMware admits that it has acquired other companies with innovative technology. VMware denies the remaining allegations of Paragraph 37 of the Counterclaims.

38. In answer to Paragraph 38 of the Counterclaims, VMware admits that some companies have shifted away from on-premises to cloud-based applications and that its virtualization software has reshaped the computer industry. VMware denies the remaining allegations of Paragraph 38 of the Counterclaims.

39. VMware denies the allegations of Paragraph 39 of the Counterclaims.

40. In answer to Paragraph 40 of the Counterclaims, VMware admits that it offers or has offered technologies such as vRealize Suite, vRealize Operations (“vROps”), vRealize Automation (“vRA”) (including vRealize Orchestrator (“vRO”)), vRealize Automation Cloud, vRealize Operations Cloud, vRealize Cloud Management, vRealize Cloud Universal, vSphere (including VirtualCenter, vCenter, vCenter High Availability (“HA”), and Distributed Resource Scheduler (“DRS”)), vCenter Server, vSphere with Tanzu (e.g., vSphere with Kubernetes), VMware vSphere Bitfusion, VMware Cloud Foundation, vCloud Suite, VMware Cloud on AWS, VMware Cloud on Dell EMC, VMware Cloud Director, CloudHealth (including CloudHealth Multicloud Platform, CloudHealth Partner Platform, CloudHealth Secure State, CloudHealth Integrations, CloudHealth for AWS, CloudHealth for Azure, CloudHealth for GCP, CloudHealth for OCI, and CloudHealth Hybrid), VMware Tanzu, VMware Tanzu Kubernetes Grid Integrated Edition, VMware Tanzu Kubernetes Grid, VMware Tanzu Kubernetes Grid Service for vSphere, and VMware Tanzu Mission Control. VMware also admits that some of its

products and services may be related and sold as a suite. VMware denies the remaining allegations of Paragraph 40 of the Counterclaims.

41. In answer to Paragraph 41 of the Counterclaims, VMware admits that page five of Exhibit 5 to the Counterclaims states: “With vRealize Operations Manager enterprise software, you can proactively identify and solve emerging issues with predictive analysis and smart alerts, ensuring optimal performance and availability of system resources - across physical, virtual, and cloud infrastructures. vRealize Operations Manager gives you complete monitoring capability in one place, across applications, storage, and network devices, with an open and extensible platform supported by third-party management packs. In addition, vRealize Operations Manager increases efficiency by streamlining key processes with preinstalled and customizable policies while retaining full control. Using data collected from system resources (objects), vRealize Operations Manager identifies issues in any monitored system component, often before the customer notices a problem.” VMware denies the remaining allegations of Paragraph 41 of the Counterclaims.

42. In answer to Paragraph 42 of the Counterclaims, VMware admits that it has developed a hypervisor known as ESXi. VMware also admits that the “Understanding vSphere DRS Performance, VMware vSphere 6” publication (available at <https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/techpaper/vsphere6-drs-perf.pdf>) states: “DRS works on a cluster of ESXi hosts and provides resource management capabilities like load balancing and virtual machine (VM) placement. DRS also enforces user-defined resource allocation policies at the cluster level, while working with system-level constraints.” VMware admits that the “Understanding vSphere DRS Performance, VMware vSphere 6” publication (available at <https://www.vmware.com/content/>

dam/digitalmarketing/vmware/en/pdf/techpaper/vsphere6-drs-perf.pdf) states: “The main goal of DRS is to ensure that VMs and their applications are always getting the compute resources that they need to run efficiently.” VMware denies the remaining allegations of Paragraph 42 of the Counterclaims.

43. In answer to Paragraph 43 of the Counterclaims, VMware admits that the “VMware vRealize Automation” publication (available at <https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/products/vrealize/vmware-whats-new-vrealize-automation.pdf>) states: “VMware vRealize® Automation™, part of VMware vRealize Suite, empowers IT to accelerate the provisioning and delivery of IT services, across infrastructure, containers, applications and custom services.” VMware admits that page five of the “Foundations and Concepts” publication (dated July 18, 2019, and available at <https://docs.vmware.com/en/vRealize-Automation/7.5/vrealize-automation-75-foundations-and-concepts.pdf>) states: “VMware vRealize™ Automation provides a secure portal where authorized administrators, developers, or business users can request new IT services. In addition, they can manage specific cloud and IT resources that enable IT organizations to deliver services that can be configured to their lines of business in a self-service catalog.” VMware denies the remaining allegations of Paragraph 43 of the Counterclaims.

44. In answer to Paragraph 44 of the Counterclaims, VMware admits that the “VMware VMotion” publication (dated 2007, available online at https://www.vmware.com/pdf/vmotion_datasheet.pdf) states: “VMware® VMotion™ enables the live migration of running virtual machines from one physical server to another with zero downtime, continuous service availability, and complete transaction integrity. VMotion is a key

enabling technology for creating the dynamic, automated, and self-optimizing data center.”

VMware denies the remaining allegations of Paragraph 44 of the Counterclaims.

45. In answer to Paragraph 45 of the Counterclaims, VMware admits that the “vSphere Availability” publication (dated Apr. 11, 2019, and available at <https://docs.vmware.com/en/VMware-vSphere/6.7/vsphere-esxi-vcenter-server-672-availability-guide.pdf>) states: “vSphere HA provides high availability for virtual machines by pooling the virtual machines and the hosts they reside on into a cluster. Hosts in the cluster are monitored and in the event of a failure, the virtual machines on a failed host are restarted on alternate hosts.” VMware denies the remaining allegations of Paragraph 45 of the Counterclaims.

46. In answer to Paragraph 46 of the Counterclaims, VMware admits that a “vSphere” publication (available online at <https://www.vmware.com/products/vsphere.html>) states: “The New vSphere – The Biggest Innovation Since the Launch of ESXi.” VMware also admits that page one of the “VMware vSphere 7 Pricing and Packaging” publication (available online at <https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/vsphere/vmw-vsphere-pricing-packaging-faq.pdf>) states: “VMware is announcing the release of VMware vSphere® 7 as the essential building block of modern cloud infrastructure. It powers the computing environment for modern applications, artificial intelligence/machine learning (AI/ML) and business-critical applications. Applications can be deployed using any combination of virtual machines (VMs), containers or Kubernetes.” VMware also admits that page one of the “VMware vSphere: The Essential Services for the Modern Hybrid Cloud” publication (available online at <https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/products/vsan/vmw-vsphere-datasheet.pdf>) states: “vSphere 7 delivers simplified lifecycle management, intrinsic

security and application acceleration for traditional applications,” “Application acceleration – Enhancements in DRS and vMotion for large and mission critical workloads,” and “Application-focused management- Organize Kubernetes clusters, containers and virtual machines within vCenter server.” VMware denies the remaining allegations of Paragraph 46 of the Counterclaims.

47. In answer to Paragraph 47 of the Counterclaims, VMware admits that Exhibit 15 to the Counterclaims states: “VMware Cloud™ on AWS delivers on this promise by providing a unified infrastructure framework that bridges the gap between private and public clouds. VMware Cloud on AWS delivers a seamlessly integrated hybrid cloud that extends on-premises vSphere environments to a VMware SDDC running on Amazon EC2 elastic, bare-metal infrastructure and is fully integrated as part of the AWS cloud” and “VMware Cloud on AWS is powered by VMware Cloud Foundation™, the unified VMware SDDC platform that integrates VMware vSphere®, VMware Virtual SAN™ and VMware NSX™ virtualization technologies.” VMware also admits that page five of the “VMware Cloud on Dell EMC” publication (dated 2020, available online at

<https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/products/vmware-cloud-on-dell-emc-technical-overview.pdf>) states: “VMware Cloud on Dell EMC is a complete solution for data center infrastructure, and it is based on industry-leading virtualization software technology from VMware and proven hyperconverged hardware from Dell EMC. The software components include VMware vSphere compute, VMware vSAN™ all-flash storage, and VMware NSX-T® networking and security. Dell EMC foundational elements include VxRail hyperconverged infrastructure appliances and high-performance top of rack network switches.” VMware denies the remaining allegations of Paragraph 47 of the Counterclaims.

48. In answer to Paragraph 48 of the Counterclaims, VMware admits that page 1 of Exhibit 37 states that “VMware Tanzu Kubernetes Grid Integrated Edition (formerly known as VMware Enterprise PKS) is a Kubernetes-based container solution[.]” VMware admits that page one of Exhibit 17 to the Counterclaims states: “VMware® Enterprise PKS is a production-grade Kubernetes-based container solution equipped with advanced networking, a private container registry, and full lifecycle management. VMware Enterprise PKS radically simplifies the deployment and operation of Kubernetes clusters so you can run and manage containers at scale on private and public clouds.” VMware admits that page 1 of Exhibit 38 states that “VMware Tanzu Kubernetes Grid Integrated Edition is a purpose-built container solution to operationalize Kubernetes for multi-cloud enterprises and service providers.” VMware denies the remaining allegations of Paragraph 48 of the Counterclaims.

49. In answer to Paragraph 49 of the Counterclaims, VMware admits that the blog article “Project Pacific – Technical Overview” (dated August 26, 2019, available online at <https://blogs.vmware.com/vsphere/2019/08/project-pacific-technical-overview.html>) states: “Project Pacific is a re-architecture of vSphere with Kubernetes as its control plane. To a developer, Project Pacific looks like a Kubernetes cluster where they can use Kubernetes declarative syntax to manage cloud resources like virtual machines, disks and networks. To the IT admin, Project Pacific looks like vSphere – but with the new ability to manage a whole application instead of always dealing with the individual VMs that make it up. [¶] Project Pacific will enable enterprises to accelerate development and operation of modern apps on VMware vSphere while continuing to take advantage of existing investments in technology, tools and skillsets. By leveraging Kubernetes as the control plane of vSphere, Project Pacific will enable developers and IT operators to build and manage apps comprised of containers and/or

virtual machines. This approach will allow enterprises to leverage a single platform to operate existing and modern apps side-by-side. [¶] The introduction of Project Pacific anchors the announcement of VMware Tanzu, a portfolio of products and services that transform how the enterprise builds software on Kubernetes.” VMware denies the remaining allegations of Paragraph 49 of the Counterclaims.

50. In answer to Paragraph 50 of the Counterclaims, VMware admits that the blog article “Introducing VMware Tanzu Mission Control to Bring Order to Cluster Chaos” (dated August 26, 2019, available online at <https://blogs.vmware.com/cloudnative/2019/08/26/vmware-tanzu-mission-control/>) states: “That’s why I’m so excited to see the introduction of VMware Tanzu as a portfolio of products and services to transform the way enterprises build software on Kubernetes. We also announced a tech preview* of VMware Tanzu Mission Control as part of that portfolio, and a way to bring consistency and control to all of your Kubernetes clusters, regardless of where they are running.” VMware denies the remaining allegations of Paragraph 50 of the Counterclaims.

51. In answer to Paragraph 51 of the Counterclaims, VMware admits that page 3 of Exhibit 39 states that “CloudHealth® by VMware® (‘CloudHealth’ or the ‘Service Offering’) is a cloud service management platform that enables customers to visualize, manage, optimize, and automate their cloud environments.” VMware admits that Exhibit 40 identifies the following as products: “Multicloud Platform,” “CloudHealth Partner Platform,” “CloudHealth for AWS,” “CloudHealth for Azure,” “CloudHealth for GCP,” “CloudHealth for OCI,” “CloudHealth Hybrid,” “CloudHealth Secure State,” and “Integrations.” VMware admits that Exhibit 41 states that “CloudHealth provides you granular visibility into cluster resource consumption through its Container Module” and that “with CloudHealth, you can:” “Optimize your infrastructure for

containers.” VMware admits that VMware acquired CloudHealth Technologies, Inc. in 2018 and that page 55 of Exhibit 42 states that “CloudHealth Hybrid added support VMware Cloud on AWS in addition to current support for vSphere.” VMware admits that page 56 of Exhibit 42 states that “With agentless integration into VMware vSphere environments or an agent-based approach for physical machines, customers can track usage, inventory, CPU, memory and disk metrics.” VMware admits that page 56 of Exhibit 42 states that “[e]very 15 minutes CloudHealth collects configuration information about all VMs and every 60 mins it[.]” VMware admits that page 5 of Exhibit 43 states that “CloudHealth acts as a bridge that connects vRealize Operations to CloudHealth and brings the costs of public cloud from CloudHealth into vRealize Operations Manager.” VMware denies the remaining allegations of Paragraph 51 of the Counterclaims.

52. In answer to Paragraph 52 of the Counterclaims, VMware admits that the “VMware vRealize Suite” publication (dated 2019, available online at <https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/datasheet/vmware-vrealize-suite-datasheet.pdf>) states: “VMware vRealize Suite delivers an enterprise-proven, hybrid cloud management platform (CMP) that includes the following products: . . . vRealize® Automation™ . . . vRealize Operation™ . . . vRealize Log Insight™ . . . vRealize Suite Lifecycle Manager™.” VMware also admits that Exhibit 21 to the Counterclaims states: “VMware vCloud Suite is a package that includes the VMware vSphere® compute virtualization platform and the industry-leading cloud management platform (CMP), VMware vRealize® Suite.” VMware also admits that Exhibit 22 to the Counterclaims states: “VMware Cloud Foundation is an integrated software platform that automates the deployment and lifecycle management of a complete software-defined data center (SDDC) on a standardized hyperconverged architecture”

and “Enterprise-Grade Services: Delivers enterprise-ready services for both traditional and containerized apps, based on market-leading VMware technologies: VMware vSphere (compute), VMware vSAN™ (storage), VMware NSX (networking and security) and VMware vRealize® Suite (cloud management).” VMware also admits that a “vSphere” publication (available online at <https://www.vmware.com/products/vsphere.html>) states: “Powered by innovations in vSphere 7 with Kubernetes, VMware Cloud Foundation Services is a new, integrated Kubernetes and RESTful API surface that enables you to drive API access to all core services.” VMware denies the remaining allegations of Paragraph 52 of the Counterclaims.

C. Densify and VMware’s Relationship

53. In answer to Paragraph 53 of the Counterclaims, VMware admits that Cirba and VMware compete in certain contexts. VMware further admits that Cirba has developed technology that relies on VMware’s innovations in virtualization. VMware lacks information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 53 of the Counterclaims and therefore denies them.

54. In answer to Paragraph 54 of the Counterclaims, VMware admits that many major companies use VMware’s virtualization platform. VMware lacks information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 54 of the Counterclaims and therefore denies them.

55. In answer to Paragraph 55 of the Counterclaims, VMware lacks information sufficient to form a belief as to the truth of the allegations of Paragraph 55 of the Counterclaims and therefore denies them.

56. In answer to Paragraph 56 of the Counterclaims, VMware admits that approximately 99% of *Fortune 1000* companies are VMware customers. VMware admits that it

has invited speakers and analysts for VMworld, a well-known industry tradeshow. VMware denies the remaining allegations of Paragraph 56 of the Counterclaims.

D. VMware [Allegedly] Copied Densify's Technology

57. VMware denies the allegations of Paragraph 57 of the Counterclaims.

58. In answer to Paragraph 58 of the Counterclaims, VMware admits that Densify sued VMware in district court for infringement of U.S. Patent Nos. 8,209,687 and 9,654,367. VMware denies the remaining allegations of Paragraph 58 of the Counterclaims.

E. VMware's [Alleged] Infringement of Densify's Intellectual Property

59. In answer to Paragraph 59 of the Counterclaims, VMware admits that the face of U.S. Patent No. 10,523,492 (“the ‘492 patent”) lists its title as “Method and System for Determining Compatibility of Computer Systems,” its inventors as Tom Yuyitung and Andrew Hillier, and its issue date as December 31, 2019, and refers to an April 21, 2006 provisional patent application. VMware also admits that what purports to be a copy of the ‘492 patent is attached to Cirba’s Counterclaims as Exhibit 27. VMware denies the remaining allegations of Paragraph 59 of the Counterclaims.

60. In answer to Paragraph 60 of the Counterclaims, VMware admits that column 1, lines 35 to 40 of the ‘492 patent states: “As a result, the IT infrastructures used by many organizations have moved away from reliance on centralized computing power and towards more robust and efficient distributed systems. Distributed systems are decentralized computing systems that use more than one computer operating in parallel to handle large amounts of data.” VMware denies the remaining allegations of Paragraph 60 of the Counterclaims.

61. In answer to Paragraph 61 of the Counterclaims, VMware admits that column 1, lines 45 to 51 of the ‘492 patent states: “While the benefits of a distributed approach are numerous and well understood, there has arisen significant practical challenges in managing such

systems for optimizing efficiency and to avoid redundancies and/or under-utilized hardware. In particular, one challenge occurs due to the sprawl that can occur over time as applications and servers proliferate.” VMware also admits that column 1, line 59 through column 2, line 2 of the ’492 patent states: “However, when multiple servers in a large computing environment are underutilized, having too many servers can become a burden. Moreover, the additional hardware requires separate maintenance considerations; separate upgrades and requires the incidental attention that should instead be optimized to be more cost effective for the organization. Heat production and power consumption can also be a concern. Even considering only the cost of having redundant licenses, removing even a modest number of servers from a large computing environment can save a significant amount of cost on a yearly basis.” VMware denies the remaining allegations of Paragraph 61 of the Counterclaims.

62. In answer to Paragraph 62 of the Counterclaims, VMware admits that column 2, lines 3 to 11 of the ’492 patent states: “As a result, organizations have become increasingly concerned with such redundancies and how they can best achieve consolidation of capacity to reduce operating costs. The cost-savings objective can be evaluated on the basis of consolidation strategies such as, but not limited to: virtualization strategies, operating system (OS) level stacking strategies, database consolidation strategies, application stacking strategies, physical consolidation strategies, and storage consolidation strategies.” VMware also admits that column 2, lines 12 to 13 of the ’492 patent states: “Virtualization involves virtualizing a physical system as a separate guest OS instance on a host machine.” VMware also admits that column 2, lines 18 to 25 of the ’492 patent states: “OS-Level application stacking involves moving the applications and data from one or more systems to the consolidated system. This can effectively replace multiple operating system instances with a single OS instance, e.g. system A running application

X and system B running application Y are moved onto system C running application Z such that system C runs applications X, Y and Z, and system A and B are no longer required.” VMware also admits that page five of Exhibit 24 states: “In a container environment, multiple containers share a single operating system instance. Each container encapsulates an application and dependencies like libraries, but it does not include the OS.” VMware denies the remaining allegations of Paragraph 62 of the Counterclaims.

63. In answer to Paragraph 63 of the Counterclaims, VMware admits that column 2, lines 35 to 40 of the ’492 patent states: “Physical consolidation moves physical systems at the OS level to multi-system hardware platforms such as Blade Servers™, Dynamic System Domains™, etc. Storage consolidation centralizes system storage through storage technologies such as Storage Area Networks (SAN), Network Attached Storage (NAS), etc.” VMware denies the remaining allegations of Paragraph 63 of the Counterclaims.

64. In answer to Paragraph 64 of the Counterclaims, VMware admits that column 2, lines 41 to 48 of the ’492 patent states: “The consolidation strategies to employ and the systems and applications to be consolidated are to be considered taking into account the specific environment. Consolidation strategies should be chosen carefully to achieve the desired cost savings while maintaining or enhancing the functionality and reliability of the consolidated systems. Moreover, multiple strategies may often be required to achieve the full benefits of a consolidation initiative.” VMware denies the remaining allegations of Paragraph 64 of the Counterclaims.

65. In answer to Paragraph 65 of the Counterclaims, VMware admits that column 2, line 64 to column 3, line 8 of the ’492 patent states: “In one aspect, a method for determining a consolidation solution for a plurality of computer systems is provided comprising obtaining a

data set comprising a compatibility score for each pair of the plurality of computer systems, each the compatibility score being indicative of the compatibility of one of the plurality of computer systems with respect to another of the plurality of computer systems; determining one or more candidate transfer sets each indicating one or more of the computer systems capable of being transferred to a target computer system; selecting a desired one of the one or more candidate transfer sets; and providing the desired one as a consolidation solution.” VMware also admits that column 5, lines 17 to 23 of the ’492 patent states: “The analysis program **10**, accessed through a computer station **14**, gathers data **18** pertaining to a collection of systems to be consolidated **16**. The analysis program **10** uses the gathered data **18** to evaluate the compatibility of the computer systems **28** and provide a roadmap **20** specifying how the original set of systems can be consolidated to a smaller number of systems **22**.” VMware also admits that column 3, lines 43 to 44 of the ’492 patent states: “FIG. 2 is a more detailed diagram of the analysis program depicted in FIG. 1.” VMware denies the remaining allegations of Paragraph 65 of the Counterclaims.

66. In answer to Paragraph 66 of the Counterclaims, VMware admits that column 1, lines 57 to column 2, line 2 of the ’492 patent states: “When cost is considered on a server-by-server basis, the additional cost of having underutilized servers is often not deemed to be troubling. However, when multiple servers in a large computing environment are underutilized, having too many servers can become a burden. Moreover, the additional hardware requires separate maintenance considerations; separate upgrades and requires the incidental attention that should instead be optimized to be more cost effective for the organization. Heat production and power consumption can also be a concern. Even considering only the cost of having redundant licenses, removing even a modest number of servers from a large computing environment can

save a significant amount of cost on a yearly basis.” VMware denies the remaining allegations of Paragraph 66 of the Counterclaims.

67. In answer to Paragraph 67 of the Counterclaims, VMware admits that column 10, lines 23 to 30 of the ’492 patent states: “The rule set **28** defines which settings are important for determining compatibility. The rule set **28** typically defines a set of rules which can be revised as necessary based on the specific environment **12**. The rule set **28** is thus preferably compiled according to the systems **16** being analysed and prior knowledge of what makes a system **16** compatible with another system **16** for a particular purpose.” VMware also admits that column 8, lines 12 to 25 of the ’492 patent states: “Rule sets **28** examine system compatibility with respect to technical configuration and business-related factors. The workload definitions **30** specify the system resource parameters and benchmarks for analyzing workload compatibility. [¶] An analysis engine **64** is also provided, which comprises compatibility and consolidation analysis engines **66** and **68** respectively. The compatibility analysis evaluates the compatibility of systems **16** through rule sets **28** and workload stacking algorithms **30**. The consolidation analysis engine **68** leverages the compatibility analysis and employs constraint-based optimization algorithms to find consolidation solutions that allows the environment **12** to operate with fewer systems **16**.” VMware also admits that page 1 of Exhibit 25 states: “In 4.1 VMware introduced DRS VM-Host Affinity Rules which allow you restrict the ESX hosts on which a VM or group of VMs can run. . . . [¶] The result is in a large HA/DRS cluster you can now pay to license just two or three of the ESX hosts and then restrict the applicable VMs to only run on one of the licensed servers.” VMware denies the remaining allegations of Paragraph 67 of the Counterclaims.

68. In answer to Paragraph 68 of the Counterclaims, VMware admits that claim 1 of the '492 patent recites, in part: "A computer implemented method for placing source systems on target systems, the method comprising: [¶] evaluating one or more source systems against other source systems and against one or more target systems using at least one rule set that evaluates parameters of the systems to determine whether the systems can or can not be placed together on a specific target system, wherein the evaluating comprises one or more of: a 1-to-1 compatibility analysis, an N-to-1 compatibility analysis, or an N-by-N compatibility analysis. . ." VMware denies the remaining allegations of Paragraph 68 of the Counterclaims.

69. In answer to Paragraph 69 of the Counterclaims, VMware admits that claim 1 of the '492 patent recites, in part: "placing the source systems onto the target systems in accordance with technical, business, and workload constraints determined in the compatibility analysis." VMware denies the remaining allegations of Paragraph 69 of the Counterclaims.

70. VMware denies the allegations of Paragraph 70 of the Counterclaims.

71. VMware denies the allegations of Paragraph 71 of the Counterclaims.

72. VMware denies the allegations of Paragraph 72 of the Counterclaims.

73. In answer to Paragraph 73 of the Counterclaims, VMware admits that page 486 of Exhibit 5 to the Counterclaims states: "vRealize Operations Manager collects performance data from monitored software and hardware resources in your enterprise and provides predictive analysis and real-time information about problems." VMware denies the remaining allegations of Paragraph 73 of the Counterclaims

74. In answer to Paragraph 74 of the Counterclaims, VMware admits that page 97 of Exhibit 14 to the Counterclaims states: "Used to specify affinity or anti-affinity between a group of virtual machines and a group of hosts." VMware also admits that page 97 of Exhibit 14 to the

Counterclaims states: “Used to specify affinity or anti-affinity between individual virtual machines.” VMware denies the remaining allegations of Paragraph 74 of the Counterclaims.

75. In answer to Paragraph 75 of the Counterclaims, VMware admits that page 101 of Exhibit 14 to the Counterclaims states: “You use a VM-Host affinity rule to specify an affinity relationship between a group of virtual machines and a group of hosts.” VMware also admits that page 4 of Exhibit 27 to the Counterclaims states: “Compute policies specify rules that tell DRS how to place workloads onto hosts. If you’ve ever used DRS affinity or anti-affinity rules this may seem like familiar territory. Be aware however: compute policy rules in VMware Cloud on AWS apply to the entire SDDC (and not just a cluster). Compute policies leverage Tags.” VMware denies the remaining allegations of Paragraph 75 of the Counterclaims.

76. In answer to Paragraph 76 of the Counterclaims, VMware admits that page 142 of Exhibit 29 to the Counterclaims states: “You can move virtual machines from one compute resource or storage location to another by using cold or hot migration. For example, with vSphere vMotion you can move powered on virtual machines away from a host to perform maintenance, to balance loads, to collocate virtual machines that communicate with each other, to move virtual machines apart to minimize fault domain, to migrate to new server hardware, and so on.” VMware denies the remaining allegations of Paragraph 76 of the Counterclaims.

77. In answer to Paragraph 77 of the Counterclaims, VMware admits that page 50 of Exhibit 28 to the Counterclaims states: “When the schedule discovers a Pod that hasn’t been assigned to a node, it needs to determine which node to schedule the Pod onto. The correct node for a Pod is determined by a number of different factors, some of which are supplied by the user and some of which are calculated by the scheduler. In general, the scheduler is trying to optimize a variety of different criteria to find the node that is best for the particular Pod.”

VMware also admits that the two images appearing in Paragraph 77, labeled “High-Level Algorithm” and “Node Affinity,” reflect excerpts of the contents of pages 51 and 54 of Exhibit 28 to the Counterclaims. VMware denies the remaining allegations of Paragraph 77 of the Counterclaims.

78. In answer to Paragraph 78 of the Counterclaims, VMware admits that page 631 of Exhibit 5 to the Counterclaims states: “You can use vCenter Server tagging to tag VMs, hosts, and/or clusters with specific tags. vRealize Operations Manager can be configured to leverage tags to define business-related placement constraints: VMs can only be placed on hosts/clusters with matching tags.” VMware denies the remaining allegations of Paragraph 78 of the Counterclaims.

79. VMware denies the allegations of Paragraph 79 of the Counterclaims.

80. VMware denies the allegations of Paragraph 80 of the Counterclaims.

81. In answer to Paragraph 81 of the Counterclaims, VMware admits that the face of U.S. Patent No. 10,951,459 (“the ’459 patent”) lists its title as “Method and System for Determining Compatibility of Computer Systems,” its inventors as Tom Yuyitung and Andrew Hillier, and its issue date as March 16, 2021, and refers to an April 21, 2006 provisional patent application. VMware also admits that what purports to be a copy of the ’459 patent is attached to Cirba’s Counterclaims as Exhibit 44. VMware denies the remaining allegations of Paragraph 81 of the Counterclaims.

82. In answer to Paragraph 82 of the Counterclaims, VMware admits that column 1, lines 48 to 58, of the ’459 patent states: “there has arisen significant practical challenges in managing such systems for optimizing efficiency and to avoid redundancies and/or underutilized hardware. In particular, one challenge occurs due to the sprawl that can occur over time as

applications and servers proliferate. Decentralized control and decision making around capacity, the provisioning of new applications and hardware, and the perception that the cost of adding server hardware is generally inexpensive, have created environments with far more processing capacity than is required by the organization.” VMware denies the remaining allegations of Paragraph 82 of the Counterclaims.

83. In answer to Paragraph 83 of the Counterclaims, VMware admits that column 1, lines 61 to 63, of the ’459 patent states: “when multiple servers in a large computing environment are underutilized, having too many servers can become a burden.” VMware admits that column 2, lines 1 to 4, of the ’459 patent states: “Even considering only the cost of having redundant licenses, removing even a modest number of servers from a large computing environment can save a significant amount of cost on a yearly basis.” VMware admits that column 2, lines 5 to 7, of the ’459 patent states: “organizations have become increasingly concerned with such redundancies and how they can best achieve consolidation of capacity to reduce operating costs.” VMware admits that column 2, lines 43 to 50, of the ’459 patent states: “strategies to employ and the systems and applications to be consolidated are to be considered taking into account the specific environment. Consolidation strategies should be chosen carefully to achieve the desired cost savings while maintaining or enhancing the functionality and reliability of the consolidated systems. Moreover, multiple strategies may often be required to achieve the full benefits of a consolidation initiative.” VMware denies the remaining allegations of Paragraph 83 of the Counterclaims.

84. In answer to Paragraph 84 of the Counterclaims, VMware admits that column 6, line 62, through column 7, line 4, of the ’459 patent states: “compatibilities between systems 16 based on the parameters to determine if efficiencies can be realized by consolidating either entire

systems 16 or aspects or components thereof. [¶] The analyses employ differential rule sets 28 to evaluate and quantify the compatibility of systems 16 with respect to technical configuration and business related factors comprised in the gathered system data 18. Similarly, workload compatibility of a set of systems 16 is assessed using workload stacking and scoring algorithms 30.” VMware denies the remaining allegations of Paragraph 84 of the Counterclaims.

85. In answer to Paragraph 85 of the Counterclaims, VMware admits that claims 1, 32, and 63 recite, among other things, “evaluating compatibility between a specific source system from the plurality of source systems and a specific target system from the plurality of target systems by evaluating one or more rules that operate against attributes or data relating to the source and target systems being evaluated.” VMware admits that paragraph 85 shows Figure 24(a) of the ’459 patent. VMware denies the remaining allegations of Paragraph 85 of the Counterclaims.

86. In answer to Paragraph 86 of the Counterclaims, VMware admits that column 29, lines 43 to 58, states: “this multi-dimensional compatibility analysis evaluates the compatibility of each transfer set 23 specified in the consolidation solution. [¶] The multi-dimensional compatibility analysis extends the original 1-to-1 compatibility analysis that assessed the transfer of a single source entity to a target. As with the 1-to-1 compatibility analysis, the multi-dimensional analysis produces an overall compatibility scorecard 98 based on technical, business and workload constraints. Technical and business compatibility are evaluated through one or more rule sets 28. Workload compatibility is assessed through one or more workload types 30. [¶] This produces multi-dimensional compatibility analysis results, which includes multi-dimensional compatibility scores, maps and details based on the proposed transfer sets 23.” VMware admits that column 7, lines 23 to 25, states: “In practice, it may be prudent to

consolidate systems **16** incrementally and assess the impact of each transfer before proceeding with additional transfers.” VMware admits that column 13, lines 15 to 17, states: “the relative importance of that property and combination of source/target values (if specified) in regard to the overall context of the comparison.” VMware denies the remaining allegations of Paragraph 86 of the Counterclaims.

87. In answer to Paragraph 87 of the Counterclaims, VMware admits that claim 1 of the ’459 patent recites, in part: “A system for determining placement of source computer systems on target computer systems, the system configured to execute operations causing the system to: collect data for a collection of computer systems, the collection of computer systems comprising a plurality of source systems and a plurality of target systems; determine a placement of at least one source system from the collection of computer systems on at least one target system from the collection of computer systems by employing the following operations: evaluate compatibility between a specific source system from the plurality of source systems and a specific target system from the plurality of target systems by evaluating one or more rules that operate against attributes or data relating to the source and target systems being evaluated; evaluate compatibility between the specific source system from the plurality of source systems and one or more other source systems either already placed on the specific target system, or being evaluated for placement onto the specific target system, to determine if the specific source system can be placed with those other source systems on the specific target system, by evaluating one or more rules that operate against attributes or data relating to the source systems; evaluate compatibility between the specific source system and the specific any one of the plurality of target system by evaluating the impact on resource utilization of the specific target system of placing the specific source system on the specific target system, in combination with the one or more other source

systems, either already placed on the specific target system, or being evaluated for placement onto the specific target system[.]” VMware denies the remaining allegations of Paragraph 87 of the Counterclaims.

88. In answer to Paragraph 88 of the Counterclaims, VMware admits that claim 1 of the ’459 patent recites, in part: “issue instructions to place the at least one source system on the at least one target system in accordance with the determined placement.” VMware denies the remaining allegations of Paragraph 88 of the Counterclaims.

89. In answer to Paragraph 89 of the Counterclaims, VMware admits that page 32 of Exhibit 45 to the Counterclaims states: “vSphere DRS determines the exact placement of the control plane VMs on the ESXi hosts and migrates them when needed. vSphere DRS is also integrated with the Kubernetes Scheduler on the control plane VMs, so that DRS determines the placement of vSphere Pods. When as a DevOps engineer you schedule a vSphere Pod, the request goes through the regular Kubernetes workflow then to DRS, which makes the final placement decision.” VMware denies the remaining allegations of Paragraph 89 of the Counterclaims.

90. In answer to Paragraph 90 of the Counterclaims, VMware admits that page 2 of Exhibit 46 to the Counterclaims states: “The vSphere Distributed Resource Scheduler (DRS) transparently balances efficiency and performance for any workload in the cluster, thus reducing resource waster and contention while allowing for higher resource utilization of the underlying infrastructure.” VMware admits that page 2 of Exhibit 46 to the Counterclaims states: “By using Kubernetes to manage the application (via pod requests, limits and priorities) and VMware infrastructure to manage the Kubernetes clusters (via resource pools and DRS), you can achieve

up to 3x higher resource utilization while simultaneously improving performance!” VMware denies the remaining allegations of Paragraph 90 of the Counterclaims.

91. In answer to Paragraph 91 of the Counterclaims, VMware admits that page 2 of Exhibit 39 to the Counterclaims states: “CloudHealth® by VMware® (‘CloudHealth’ or the ‘Service Offering’) is a cloud service management platform that enables customers to visualize, manage, optimize, and automate their cloud environments.” VMware admits that page 13 of Exhibit 47 to the Counterclaims states: “Cloud management platforms are integrated products that connect the administration of applications and workloads to your business intent, regardless of where they’re running.” VMware admits that page 6 of Exhibit 48 to the Counterclaims states: “From migration assessments to cost, utilization, performance, and security optimization recommendations, we work with you to provide unparalleled industry expertise and support across the world’s leading clouds and hybrid environments.” VMware denies the remaining allegations of Paragraph 91 of the Counterclaims.

92. In answer to Paragraph 92 of the Counterclaims, VMware admits that page 32 of Exhibit 45 to the Counterclaims states: “vSphere DRS determines the exact placement of the control plane VMs on the ESXi hosts and migrates them when needed. vSphere DRS is also integrated with the Kubernetes Scheduler on the control plane VMs, so that DRS determines the placement of vSphere Pods. When as a DevOps engineer you schedule a vSphere Pod, the request goes through the regular Kubernetes workflow then to DRS, which makes the final placement decision.” VMware denies the remaining allegations of Paragraph 92 of the Counterclaims.

93. In answer to Paragraph 93 of the Counterclaims, VMware admits that page 9 of Exhibit 49 to the Counterclaims states: “The vSphere statistics subsystem collects data on the

resource usage of inventory objects. Data on a wide range of metrics is collected at frequent intervals, processed, and archived in the vCenter Server database.” VMware admits that page 79 of Exhibit 50 to the Counterclaims states: “vSphere DRS is a critical feature of vSphere which is required to maintain the health of the workloads running inside vSphere Cluster.” VMware denies the remaining allegations of Paragraph 93 of the Counterclaims.

94. In answer to Paragraph 94 of the Counterclaims, VMware admits that page 56 of Exhibit 51 to the Counterclaims states: “Tags and attributes allow you to attach metadata to objects in the vSphere inventory to make it easier to sort and search for these objects.” VMware admits that page 56 of Exhibit 51 to the Counterclaims states: “For example, if you wanted to tag your virtual machines by guest operating system type, you can create a category called operating system.” VMware admits that page 4 of Exhibit 52 to the Counterclaims states: “Using tags and custom attributes, a vSphere admin can ensure that vSphere objects are organized and logically arranged. Tags and categories let vSphere administrators organize different vSphere objects like datastores, virtual machines, hosts, and so on.” VMware admits that page 2 of Exhibit 52 to the Counterclaims shows the figure in Paragraph 94 of the Counterclaims. VMware denies the remaining allegations of Paragraph 94 of the Counterclaims.

95. In answer to Paragraph 95 of the Counterclaims, VMware admits that page 36 of Exhibit 53 to the Counterclaims states: “vSphere Distributed Resource Scheduling (vSphere DRS) provides automated load distribution within a vSphere Cluster by migrating workloads from heavily loaded ESXi hosts to ESXi hosts with more available resources in the vSphere Cluster, as well as by providing intelligence around initial workload placement.” VMware admits that page 4 of Exhibit 54 to the Counterclaims states: “vSphere 7.0 DRS is faster and lighter, ensuring rapid placement across hosts, using a soft anti-affinity compute policy to

separate the Controllers onto separate hosts when possible. Anti-affinity ensures that a single controller failure does not impact the availability of the cluster.” VMware admits that page 353 of Exhibit 45 to the Counterclaims states: “DRS first attempts to migrate the virtual machine running vCenter Server to another host, such as VMs that are affinitized to the host or running on the local storage of the host, and workloads, including vSphere Pods to other hosts, so that the remediation succeeds.” VMware denies the remaining allegations of Paragraph 95 of the Counterclaims.

96. In answer to Paragraph 96 of the Counterclaims, VMware admits that page 87 of Exhibit 50 to the Counterclaims states: “Each migration recommendation is computed using the VM happiness metric which measures execution efficiency.” VMware admits that page 87 of Exhibit 50 to the Counterclaims states: “The system supplies as many recommendations as necessary to enforce rules and balance the resources of the cluster. Each recommendation includes the virtual machine to be moved, current (source) host and destination host, and a reason for the recommendation. The reason can be one of the following: Balance average CPU loads or reservations. Balance average memory loads or reservations. Satisfy resource pool reservations. Satisfy an affinity rule.” VMware denies the remaining allegations of Paragraph 96 of the Counterclaims.

97. In answer to Paragraph 97 of the Counterclaims, VMware admits that page 21 of Exhibit 51 to the Counterclaims states: “vSphere DRS collects resource use information for all hosts and virtual machines in the cluster and gives recommendations (or migrates virtual machines) in one of two situations: Initial placement – When you power on a virtual machine in the cluster for the first time, DRS either places the virtual machine or makes a recommendation. Load balancing – DRS attempts to improve resource use across the cluster by performing

automatic migrations of virtual machines (vMotion) or by providing a recommendation for virtual machine migrations.” VMware admits that page 117 of Exhibit 51 to the Counterclaims states: “DRS supports initial placement of vGPU VMs running vSphere 6.7 Update 1 and later without load balancing support.” VMware admits that page 105 of Exhibit 51 to the Counterclaims states: “For example, with vSphere vMotion you can move powered on virtual machines away from a host to perform maintenance, to balance loads, to collocate virtual machines that communicate with each other, to move virtual machines apart to minimize fault domain, to migrate to new server hardware, and so on.” VMware denies the remaining allegations of Paragraph 97 of the Counterclaims.

98. VMware denies the allegations of Paragraph 98 of the Counterclaims.

99. VMware denies the allegations of Paragraph 99 of the Counterclaims.

F. VMware’s [Alleged] Infringement Has [Allegedly] Injured Densify

100. VMware denies the allegations of Paragraph 100 of the Counterclaims.

101. VMware denies the allegations of Paragraph 101 of the Counterclaims.

102. In answer to Paragraph 102 of the Counterclaims, VMware admits page 1 of Exhibit 31 to the Counterclaims states: “VMware vSphere 7 with Kubernetes [¶] The biggest vSphere innovation since the launch of the ESXi hypervisor.” VMware denies the remaining allegations of Paragraph 102 of the Counterclaims.

103. VMware denies the allegations of Paragraph 103 of the Counterclaims.

CLAIM I

VMWARE’S ALLEGED INFRINGEMENT OF THE ’492 PATENT

104. VMware repeats and incorporates by reference its responses to Paragraphs 1-103 of the Counterclaims as if fully stated herein.

105. VMware denies the allegations of Paragraph 105 of the Counterclaims.

106. VMware denies the allegations of Paragraph 106 of the Counterclaims.

107. VMware denies the allegations of Paragraph 107 of the Counterclaims.

108. VMware denies the allegations of Paragraph 108 of the Counterclaims.

109. VMware denies the allegations of Paragraph 109 of the Counterclaims.

110. VMware denies the allegations of Paragraph 110 of the Counterclaims.

111. In answer to Paragraph 111 of the Counterclaims, VMware admits that the blog post available at <https://blogs.vmware.com/vsphere/2020/03/vsphere-7-features.html> is on VMware's website and that VMware provides other websites and blogs relating to VMware's products. VMware denies the remaining allegations of Paragraph 111 of the Counterclaims.

112. In answer to Paragraph 112 of the Counterclaims, VMware admits that the page <https://docs.vmware.com/en/VMware-vSphere/index.html> is on VMware's website and that the public may access documents relating to VMware's products on VMware's website. VMware denies the remaining allegations of Paragraph 112 of the Counterclaims.

113. In answer to Paragraph 113 of the Counterclaims, VMware admits that VMware is involved with industry events, including VMworld, seminars, and live and on-demand webcasts and webinars. VMware denies the remaining allegations of Paragraph 113 of the Counterclaims.

114. VMware denies the allegations of Paragraph 114 of the Counterclaims.

115. VMware denies the allegations of Paragraph 115 of the Counterclaims.

CLAIM II

VMWARE'S ALLEGED INFRINGEMENT OF THE '459 PATENT

116. VMware repeats and incorporates by reference its responses to Paragraphs 1-115 of the Counterclaims as if fully stated herein.

117. VMware denies the allegations of Paragraph 117 of the Counterclaims.
118. VMware denies the allegations of Paragraph 118 of the Counterclaims.
119. VMware denies the allegations of Paragraph 119 of the Counterclaims.
120. VMware denies the allegations of Paragraph 120 of the Counterclaims.
121. VMware denies the allegations of Paragraph 121 of the Counterclaims.
122. VMware denies the allegations of Paragraph 122 of the Counterclaims.
123. In answer to Paragraph 123 of the Counterclaims, VMware admits that the page

<https://tanzu.vmware.com/tanzu> is on VMware's website and that VMware provides other websites and blogs relating to VMware's products. VMware denies the remaining allegations of Paragraph 123 of the Counterclaims.

124. In answer to Paragraph 124 of the Counterclaims, VMware admits that the page <https://docs.pivotal.io/> is on VMware's website and that the public may access documents relating to VMware's products on VMware's website. VMware admits that page 1 of Exhibit 56 to the Counterclaims states: "Detailed documentation to help you install, understand, and succeed with VMware Tanzu enterprise-grade software." VMware denies the remaining allegations of Paragraph 124 of the Counterclaims.

125. In answer to Paragraph 125 of the Counterclaims, VMware admits that VMware hosts industry events, including VMworld, and participates in seminars and live and on-demand webcasts and webinars. VMware denies the remaining allegations of Paragraph 125 of the Counterclaims.

126. VMware denies the allegations of Paragraph 126 of the Counterclaims.

127. VMware denies the allegations of Paragraph 127 of the Counterclaims.

PRAYER FOR RELIEF

128. VMware denies that Cirba has a right to any of the relief it seeks in its prayer for relief in Paragraph 128 of the Counterclaims or otherwise.

DEMAND FOR JURY TRIAL

129. The allegations of Paragraph 129 of the Counterclaims state legal conclusions, which do not require an admission or denial. But if a response is required, VMware denies them.

AFFIRMATIVE AND ADDITIONAL DEFENSES

Without assuming any burden that it would not otherwise bear, and without waiver, limitation, or prejudice to asserting additional defenses, VMware asserts the following affirmative and additional defenses:

DEFENSE NO. 1 **(Failure to State a Claim)**

130. Cirba has failed to state a claim on which relief can be granted.

DEFENSE NO. 2 **(Non-Infringement of the '492 patent)**

131. VMware has not infringed and is not infringing, directly or indirectly, literally or under the doctrine of equivalents, any valid and enforceable claim of the '492 patent.

DEFENSE NO. 3 **(Non-Infringement of the '492 patent under the Reverse Doctrine of Equivalents)**

132. To the extent that Cirba alleges that VMware infringes the '492 patent, Cirba's claims for relief are barred, in whole or in part, by the reverse doctrine of equivalents.

DEFENSE NO. 4 **(Prosecution History Estoppel/Prosecution Disclaimer as to the '492 patent)**

133. Prosecution history estoppel and/or prosecution disclaimer preclude infringement of the claims of the '492 patent.

DEFENSE NO. 5
(Invalidity of the '492 patent)

134. The claims of the '492 patent are invalid for failing to meet one or more of the statutory and decisional conditions for patentability under Title 35 of the United States Code, including, without limitation, §§ 101, 102, 103, and 112.

DEFENSE NO. 6
(Non-Infringement of the '459 patent)

135. VMware has not infringed and is not infringing, directly or indirectly, literally or under the doctrine of equivalents, any valid and enforceable claim of the '459 patent.

DEFENSE NO. 7
(Non-Infringement of the '459 patent under the Reverse Doctrine of Equivalents)

136. To the extent that Cirba alleges that VMware infringes the '459 patent, Cirba's claims for relief are barred, in whole or in part, by the reverse doctrine of equivalents.

DEFENSE NO. 8
(Prosecution History Estoppel/Prosecution Disclaimer as to the '459 patent)

137. Prosecution history estoppel and/or prosecution disclaimer preclude infringement of the claims of the '459 patent.

DEFENSE NO. 9
(Invalidity of the '459 patent)

138. The claims of the '459 patent are invalid for failing to meet one or more of the statutory and decisional conditions for patentability under Title 35 of the United States Code, including, without limitation, §§ 101, 102, 103, and 112.

DEFENSE NO. 10
(No Recovery of Costs)

139. Cirba's recovery of costs is limited under 35 U.S.C. § 288.

DEFENSE NO. 11
(Limitations on Damages)

140. Cirba's claims for relief are barred, in whole or part, by 28 U.S.C. § 1498 and 35 U.S.C. §§ 286 and 287.

DEFENSE NO. 12
(Limitations on Cirba's Recovery)

141. This action is not an exceptional case in Cirba's favor, and Cirba may not recover, in whole or in part, its attorneys' fees and any costs under 35 U.S.C. § 285 or any other applicable law.

DEFENSE NO. 13
(Lack of Constitutional and Statutory Standing and Improper Joinder)

142. Cirba Inc. lacks Article III standing under the U.S. Constitution and statutory standing under Title 35, United States Code, to assert infringement of or to obtain relief for any infringement of the '492 patent and the '459 patent because Cirba Inc. is neither an owner of the patents nor an exclusive licensee with sufficient rights. Cirba Inc.'s counterclaims in C.A. No. 20-272 for infringement of these patents therefore must be dismissed.

143. In addition, Cirba IP, Inc., the purported "own[er of] all right, title, and interest in and to" the '492 patent and the '459 patent (D.I. 75, Counterclaims ¶ 11), is not a proper party to C.A. No. 20-272. VMware did not sue Cirba IP, Inc. in C.A. No. 20-272, and because Cirba Inc. lacked constitutional and statutory standing to assert counterclaims in C.A. No. 20-272 for infringement of these patents, it could not properly join non-party Cirba IP, Inc. under the Federal Rules of Civil Procedure (or otherwise) to its improper infringement counterclaims. Non-party Cirba IP, Inc.'s purported counterclaims for infringement of the '492 patent and the '459 patent therefore must be dismissed based on its improper joinder to C.A. No. 20-272 and the lack of subject-matter jurisdiction over those non-party counterclaims.

DEFENSE NO. 14
(Unenforceability of the '492 Patent: Inequitable Conduct)

144. The '492 patent is unenforceable due to Cirba's inequitable conduct. As discussed below, the named inventors of the '492 patent, Andrew D. Hillier ("Hillier") and Tom Yuyitung ("Yuyitung"), having a duty of candor and good faith in dealing with the United States Patent and Trademark Office ("PTO"), withheld information material to patentability of the '492 patent from the PTO and made affirmative misrepresentations to the PTO with an intent to deceive the PTO.

A. Background

145. The '492 patent was issued on December 31, 2019, from U.S. Patent Application No. 14/341,471 (the "'471 application"), which was filed on July 25, 2014.

146. U.S. Patent No. 8,209,687 (the "'687 patent") was issued on June 26, 2012, from U.S. Patent Application No. 12/201,323 (the "'323 application"), which was filed on August 29, 2008.

147. The '323 application and the '471 application named the same two inventors, Hillier and Yuyitung. The '687 patent and the '492 patent are both assigned to Cirba IP, Inc.

148. The '492 patent and the '687 patent describe similar technologies. In addition, the '492 and '687 patents both claim similar subject matter related to the placement of source systems (*e.g.*, virtual machines ("VMs") in the '687 patent) onto target systems (*e.g.*, virtual hosts in the '687 patent) by evaluating the source systems against target systems based on three constraints: technical, business, and workload constraints.

149. For example, claim 1 of the '492 patent recites:

A computer implemented method for placing source systems on target systems, the method comprising:

evaluating one or more source systems against other source systems and against one or more target systems using at least one rule set that evaluates parameters of the systems to determine whether the systems can or can not be placed together on a specific target system,

wherein the evaluating comprises one or more of: a 1-to-1 compatibility analysis, an N-to-1 compatibility analysis, or an N-by-N compatibility analysis; and

placing the source systems onto the target systems in accordance with technical, business, and workload constraints determined in the compatibility analysis.

150. Likewise, claim 7 of the '687 patent recites:

A method for validating an existing virtualized environment comprising a plurality of virtual machines placed on one or more virtual hosts, said method comprising:

obtaining a data set for each of said plurality of virtual machines, each data set comprising information pertaining to technical, business and workload constraints associated with a corresponding virtual machine;

evaluating the placement of said virtual machines in said virtualized environment using said data sets by evaluating each virtual guest against each virtual host and other virtual guests using one or more rule sets pertaining to said technical, business and workload constraints to determine guest-host placements; and

identifying the existence of virtual machines with suboptimal placements to enable alternative placements for said virtual machines.

151. The '471 application and the '323 application were examined, and ultimately allowed to issue, by two different examiners of the PTO. Cirba's prosecution agent, Brett Slaney at Blake, Cassel & Graydon LLP, filed and prosecuted the '471 application.

152. On January 2, 2019, the examiner issued an office action, rejecting claims 1-6, 10-18, and 22-24 of the '471 application as anticipated by U.S. Patent No. 7,577,722 issued to Khandekar ("Khandekar") under 35 U.S.C. § 102 (the "January 2 Office Action"), the same

reference that the examiner of the '323 application had previously found rendered that application obvious.

153. The rejected claim 1 of the '471 application recited:

A computer implemented method for determining compatibility of computer systems for combining source systems on target systems, the method comprising:

analyzing compatibility parameters for the computer systems to determine whether a source system is compatible with at least one of:

i) a target system, and

ii) another source system, wherein the compatibility parameters correspond to features or characteristics of the respective computer systems that can be evaluated, quantified, measured, or compared between systems;

analyzing source system workload data to determine which of the computer systems is operable with another system on the target system; and

generating an output comprising a workload placement solution based on which of the computer systems is operable and compatible with other systems, to enable one or more placements of source systems onto target systems to be implemented.

154. Dependent claim 2 of the '471 application, which the examiner also rejected as anticipated by Khandekar, further recited “wherein the compatibility parameters comprise technical parameters of the systems and **non-technical business parameters** in a computing environment comprising the computer systems.” (Emphasis added.)

155. The examiner found that Khandekar teaches each limitation recited in independent claim 1 of the '471 application. For example, the examiner pointed to Khandekar's disclosure of a “heuristics engine” that “applies heuristics/rules” to select the “most appropriate” configuration for a source (*e.g.*, VM) as part of a larger system for placing sources (*e.g.*, VMs) onto targets (*e.g.*, hosts).

156. The examiner also found that Khandekar teaches “wherein the compatibility parameters comprise technical parameters of the systems and non-technical business parameters in a computing environment comprising computer systems” as recited in then dependent claim 2 of the ’471 application. Cirba largely incorporated this limitation in a subsequent claim amendment into what issued as claim 1 of the ’492 patent. For example, the examiner cited Khandekar’s disclosure that a system designer would “be able to determine which heuristics/rules to implement in the heuristics engine using known design criteria.” The examiner also cited Khandekar’s disclosure that the heuristics engine may include “[k]nown expert systems, ‘intelligent assistants,’ and other **knowledge-based systems** and engines that can be embedded in other products and **loaded with domain knowledge**” to “implement [its] various decision functions.” (Emphasis added.)

157. On April 25, 2019, while the ’471 application was still pending, Cirba filed a Complaint in this Court in Civil Action No. 19-742 alleging that VMware infringed the ’687 patent (the “742 Delaware Litigation”).

158. About two weeks later, Cirba sought expedited discovery and a preliminary injunction (“PI”) on VMware’s alleged infringement of the ’687 patent. On June 7, 2019, VMware served Cirba with VMware’s opposition to Cirba’s motion for PI. VMware’s opposition identified nine prior art references to the ’687 patent and detailed the specific grounds that invalidate claims 2, 7, 13, and 16 of the ’687 patent. VMware also included a declaration from its technical expert, Dr. Jason Nieh, disclosing his initial opinions about the invalidity of the ’687 patent.

159. VMware’s opposition to Cirba’s motion and Dr. Nieh’s PI declaration identified the following prior art: (1) U.S. Patent No. 8,667,500 issued to Ji (“Ji”); (2) the “Resource

Management with VMware DRS” reference; (3) Raman, R. et al., “Policy Driven Heterogeneous Resource Co-Allocation with Gangmatching” from Proceedings of the 12th IEEE Int’l. Symposium on High Performance Distributed Computing, on June 22-24, 2002 (“Raman”); and (4) VMware’s VirtualCenter 2.0, including (i) the DRS 2006 Datasheet, (ii) the VMware VirtualCenter Product Datasheet (“VirtualCenter 2006 Datasheet”), (iii) the VMware VMotion Product Datasheet (“VMotion 2006 Datasheet”), and (iv) the Resource Management Guide of ESX Server 3.0.1 and VirtualCenter 2.0.1 (“VirtualCenter Resource Management Guide”).

160. On information and belief, the named inventors of the ’492 patent, Hillier and Yuyitung, were aware of the materials related to VMware’s invalidity analysis of the ’687 patent, including VMware’s opposition to Cirba’s motion for a PI, Dr. Nieh’s PI declaration, and the underlying prior art. For example, Hillier was Cirba’s CTO and an integral part of Cirba’s effort to obtain a PI, discovery, and trial in the 742 Delaware Litigation. Likewise, Yuyitung was Cirba’s Chief Architect for the Cirba product alleged to practice the ’687 patent and a discovery witness in the 742 Delaware Litigation.

161. On July 2, 2019, Cirba’s prosecution agent Slaney—on behalf of Cirba—responded to the examiner’s January 2, 2019 Office Action. Cirba’s response included amendments to the claims of the ’471 application. In particular, Cirba amended the claims of the ’471 application to recite source-target and target-target evaluations based on technical, business, and workload constraints—similar to the limitations claimed in the ’687 patent. For example, independent claim 1 of the ’471 application was amended as follows:

1. (Currently amended) A computer implemented method for ~~determining compatibility of computer systems for combining placing~~ source systems on target systems, the method comprising:

~~analyzing compatibility parameters for the computer systems to determine whether a source system is compatible with~~

~~at least one of: i) a target system, and ii) another source system, wherein the compatibility parameters correspond to features or characteristics of the respective computer systems that can be evaluated, quantified, measured, or compared between systems;~~

~~analyzing source system workload data to determine which of the computer systems is operable with another system on the target system; and~~

~~evaluating one or more source systems against other source systems and against one or more target systems using at least one rule set that evaluates parameters of the systems to determine whether the systems can or can not be placed together on a specific target system, wherein the evaluating comprises one or more of: a 1-to-1 compatibility analysis, an N-to-1 compatibility analysis, or an N-by-N compatibility analysis; and~~

~~generating an output comprising a workload placement solution based on which of the computer systems is operable and compatible with other systems, to enable one or more placements of source systems onto target systems to be implemented.~~

~~placing the source systems onto the target systems in accordance with technical, business, and workload constraints determined in the compatibility analysis.~~

162. Cirba argued that “Khandekar does not teach or suggest evaluating source systems by performing a compatibility analysis (as recited in claim 1), let alone placing source systems based on technical, business and workload constraints determined in the compatibility analysis. Khandekar also fails to provide any details on their disclosed ‘heuristics engine’ that would lead a person skilled in the art to what is recited in the present claims.”

163. Specifically, in overcoming the examiner’s rejection, Cirba represented the following to the PTO:

First, Applicant notes that Khandekar does not in any way mention **business constraints or non-technical factors** that can impact VM placement. The most detailed description of the heuristics algorithm is given in col. 20 lines 31-62; but does not mention any non-technical criteria, such as software licensing, maintenance windows, service level agreements, etc. This passage simply says

[“]The system designer will be able to determine which heuristics/rules to implement”. Given that the state of the art at the time of Khandekar was to only scrutinize resource utilization and technical considerations, it would be a leap to suggest that Khandekar suggests this feature, namely to incorporate business constraints into the workload placement process.

Second, Khandekar mentions a “heuristics engine” **but does not provide enough detail for someone skilled in the art to contemplate a meaningful implementation**, let alone what is recited in claim 1 as amended. . . . Khandekar at most teaches the need for a heuristics engine as part of the system it describes, but not sufficient detail to amount to a disclosure of what is claimed in the present application.

(Emphasis added.)

164. With the July 2, 2019 response, Slaney—on behalf of Cirba—also filed an Information Disclosure Statement (“July 2, 2019 IDS”) in connection with the ’471 application. The July 2, 2019 IDS identified only the following prior art, a subset of the references that VMware and its expert had already identified to Cirba and analyzed in the 742 Delaware Litigation: (1) Ji; (2) the “Resource Management with VMware DRS” reference; (3) DRS 2006 Datasheet; and (4) Raman.

165. On September 26, 2019, VMware served Cirba with its initial invalidity contentions that identified at least 38 prior art references for the ’687 patent. Among others, VMware’s initial invalidity contentions identified the following prior art: (1) U.S. Patent No. 8,347,297 issued to Mateo (“Mateo”), (2) U.S. Patent Publication No. 2007/0271560 of Wahlert et al. (“Wahlert”), and (3) a presentation given by VMware’s then-employee Carl Waldspurger on October 18-20, 2005 related to VMware’s VirtualCenter 2.0 and entitled, “Managing Datacenter Resources Using the VirtualCenter Distributed Resource Scheduler” (“Waldspurger 2005 Presentation”). VMware’s invalidity contentions attached seven claim charts showing

detailed analyses of how the prior art, including VMware's VirtualCenter 2.0, Mateo, and Wahlert, disclose the claimed invention of the '687 patent.

166. On October 7, 2019, VMware served Cirba with its supplemental invalidity contentions for the '687 patent. These contentions again attached detailed claim charts.

167. On November 19, 2019, VMware served Cirba with its final invalidity contentions attaching detailed claim charts, which included detailed analysis of how VMware's VirtualCenter 2.0 disclosed the '687 patent.

168. On November 29, 2019, VMware served Cirba with the expert report of Dr. Nieh, VMware's technical expert. VMware also served Cirba with a redacted version² of the expert report in response to Cirba's counsel's request to share the report with their clients. Dr. Nieh's expert report further articulates his opinions that VirtualCenter 2.0, Mateo, and Wahlert show the '687 patent is invalid, among other invalidity grounds. Dr. Nieh's invalidity opinion based on VirtualCenter 2.0 cites to various documentation related to VirtualCenter 2.0, including the VirtualCenter 2006 Datasheet, VMotion 2006 Datasheet, and VirtualCenter Resource Management Guide, among others.

169. Cirba (including at least Hillier and Yuyitung) withheld at least the following information material to the patentability of the '471 application from the PTO:

- The existence of the 742 Delaware Litigation;
- The additional prior art that VMware provided to Cirba during the 742 Delaware Litigation, including, for example, Mateo, Wahlert, the VirtualCenter 2006 Datasheet,

² The redacted version of Dr. Nieh's report redacted his analysis on the VirtualCenter 2.0 source code, but did not redact his analysis on the other materials related to VirtualCenter 2.0 and other prior art.

- the VMotion 2006 Datasheet, the VirtualCenter Resource Management Guide, and the Waldspurger 2005 Presentation (collectively, the “Additional Prior Art”); and
- The detailed allegations and analyses that show the ’687 patent is invalidated by the prior art, including VMware’s invalidity contentions and the expert opinions regarding the ’687 patent articulated in Dr. Nieh’s PI declaration and expert report (collectively, the “’687 Invalidity Analyses”).

170. On December 31, 2019, the ’471 application was issued as the ’492 patent.

171. Despite the extensive litigation centered on the ’687 patent and the invalidity challenge to the ’687 patent, neither Hillier nor Yuyitung (or anyone else at Cirba) informed the PTO about any of this information that was material to patentability of the subject matter claimed in the ’471 application.

172. Specifically, neither Hillier nor Yuyitung (or anyone else at Cirba) informed the PTO that the ’687 patent, which is directed to similar technology claimed in the ’471 application, was even involved in litigation. They also failed to disclose to the PTO the Additional Prior Art even though they were put on notice of the Additional Prior Art, and of its importance to the ’471 application, during the 742 Delaware Litigation. And they never disclosed to the PTO any portion of the ’687 Invalidity Analyses served on Cirba by VMware during the 742 Delaware Litigation.

173. On March 23, 2020, Cirba filed a counterclaim in this Court in Civil Action No. 20-272 (the “272 Delaware Litigation”; D.I. 75) alleging that VMware has infringed and continues to infringe the ’492 patent.³

³ The Court consolidated the 272 Delaware Litigation with the 742 Delaware Litigation on December 21, 2020. (D.I. 946.)

B. Hillier and Yuyitung Violated Their Duties of Candor to the PTO

174. Under 37 C.F.R. § 1.56, Hillier and Yuyitung, as inventors and individuals associated with the filing and prosecution of the '471 application, each owed a duty of candor and good faith in their dealings with the PTO. This includes an obligation to disclose to the PTO all information known to that individual to be material to patentability.

175. Hillier and Yuyitung each executed sworn inventor oaths on or about January 22, 2015 as part of the prosecution of the '471 application. These oaths state: "I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both."

176. Pursuant to 37 C.F.R. § 1.63(c), "[a] person may not execute an oath or declaration for an application unless that person has reviewed and understand the contents of the application, including the claims, and is aware of the duty to disclose to the [U.S. Patent and Trademark] Office all information known to the person to be material to patentability as defined in [37 C.F.R.] § 1.56."

177. Hillier also executed sworn inventor oaths on or about September 26, 2006 as part of the prosecution of U.S. Patent Application Nos. 11/535,308 and 11/535,355, to which the '471 application claimed priority. These oaths state: "I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application."

178. Hillier and Yuyitung each also executed a sworn inventor oath on or about April 23, 2007 as part of the prosecution of U.S. Patent Application No. 11/738,936, of which the '471 application is a continuation. This oath states: "I acknowledge the duty to disclose information

which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.”

179. Hillier and Yuyitung were simultaneously involved in both the 742 Delaware litigation and the prosecution of the ’492 patent, and were aware of the existence of the 742 Delaware Litigation, the Additional Prior Art, and the ’687 Invalidity Analyses before the issuance of the ’492 patent.

180. For example, Cirba designated Hillier as a corporate witness to testify on topics related to the conception, reduction to practice, prosecution, and prior art of the ’687 patent as well as Cirba’s product operating with VMware’s VirtualCenter. He submitted multiple declarations and testified by deposition on July 17 and October 31, 2019 in the 742 Delaware Litigation. Likewise, Cirba identified Yuyitung as a person with knowledge of the conception and reduction to practice of the inventions claimed in the ’687 patent, and Yuyitung was deposed on October 18, 2019 in the 742 Delaware Litigation.

181. Hillier and Yuyitung violated their duties of candor when they knowingly and affirmatively chose not to disclose the following material and non-cumulative information in the July 2, 2019 IDS or thereafter until the ’492 patent issued: (a) the existence of the 742 Delaware Litigation, (b) the Additional Prior Art, and (c) the ’687 Invalidity Analyses.

C. The Withheld Information Is Material to the Patentability of the ’492 Patent

182. The withheld information is material to the patentability of the subject matter claimed in the ’492 patent. Had Hillier or Yuyitung (or anyone else at Cirba) disclosed it, the examiner would not have allowed the ’471 application to issue with the claims as amended on July 2, 2019.

1. The 742 Delaware Litigation is material information

183. Hillier and Yuyitung chose to keep the PTO in the dark about the 742 Delaware Litigation despite their knowledge that the suit centered on claims directed to subject matter that was substantially similar to the methods claimed in the '492 patent. Hillier and Yuyitung were under a duty to disclose the 742 Delaware Litigation. The MPEP requires that “[w]here the subject matter for which a patent is being sought is or has been involved in litigation ... the existence of such litigation and any other material information arising therefrom must be brought to the attention of the examiner or other appropriate official at the U.S. Patent and Trademark Office.” MPEP § 2001.06(c).

184. The 742 Delaware Litigation is material to the patentability of the '492 patent at least because the '687 patent claims substantially similar subject matter as the '492 patent. The substantial overlap between the subject matter claimed by the '492 and '687 patents shows that the prior art and analyses from litigation of the '687 patent will likewise apply to the claims of the '492 patent. At the latest, the July 2, 2019 claim amendment directly put Hillier and Yuyitung on notice of the relevance of the prior art of the '687 patent to the '471 application.

185. Had Hillier or Yuyitung (or anyone else at Cirba) disclosed the 742 Delaware Litigation to the PTO, the examiner would not have allowed the '492 patent to issue with its present claims.

2. The Additional Prior Art from the 742 Delaware Litigation is material information

186. On information and belief, Hillier and Yuyitung chose to withhold the Additional Prior Art. For example, Hillier and Yuyitung withheld at least the following non-cumulative prior art references, each of which is material to the patentability of the '492 patent, during prosecution of the '471 application: Mateo, Wahlert, the VirtualCenter 2006 Datasheet, the

VMotion 2006 Datasheet, the VirtualCenter Resource Management Guide, and the Waldspurger 2005 Presentation.

187. During prosecution of the '471 application, Hillier and Yuyitung overcame the examiner's rejection by arguing (or authorizing the argument) that Khandekar did not anticipate or render obvious claim 1 of the '471 application because it did not disclose "business or non-technical factors that can impact VM placement." Specifically, they argued that Khandekar did not teach "placing the source systems onto the target systems in accordance with technical, business, and workload constraints," as recited in amended claim 1 of the '471 application.

188. The withheld Additional Prior Art would have blocked the '471 claims from issuing because each discloses "placing the source systems onto the target systems in accordance with technical, business, and workload constraints," among other limitations, as recited in independent claim 1 of the '492 patent.

189. Mateo, under Cirba's apparent infringement theory, discloses a method for optimizing the placement of source systems as virtual machines onto target systems supporting virtualization by analyzing business constraints when placing source systems onto target systems. For example, Mateo discloses that location information, networking zones, environment membership, and availability requirements are considered when placing source systems onto target systems. Mateo discloses the rules that the system uses to place sources onto targets in accordance with these business constraints. For instance, sources with like operating systems are grouped together (*e.g.*, by evaluating each source's operating system against other sources' operating systems). As another example, sources' availability targets are compared against sources' and targets' availability requirements to place sources onto targets that can provide the necessary availability.

190. Likewise, Wahlert, under Cirba’s apparent infringement theory, discloses methods for placing source systems as virtual machines onto target systems that support virtualization according to business or non-technical constraints. As an example, Wahlert discloses placing sources onto targets based on “non-utilization factors” and placing sources to account for software licensing requirements, which Cirba identified as an example of the “business constraints” recited in claim 1, and allegedly not disclosed in the prior art, in its July 2, 2019 response.

191. Moreover, the undisclosed descriptions of the system prior art VirtualCenter 2.0 (including for example, the VirtualCenter 2006 Datasheet, the VMotion 2006 Datasheet, the VirtualCenter Resource Management Guide, and the Waldspurger 2005 Presentation) would have blocked issuance of the ’492 patent. In particular, under Cirba’s apparent infringement theory, the undisclosed descriptions of VirtualCenter 2.0 show how VirtualCenter 2.0 incorporated DRS and High Availability (“HA”) to place source systems as virtual machines onto target systems supporting virtualization based at least in part on an evaluation of their compatibility. For example, VirtualCenter 2.0 evaluated the placement of VMs using VM-VM affinity and/or anti-affinity rules to address systems availability targets, *i.e.*, business or non-technical constraints.

192. Moreover, the VirtualCenter Resource Management Guide describes high availability settings, which include several examples of non-technical constraints to be considered in source-target placement. In addition, the VirtualCenter Resource Management Guide and the Waldspurger 2005 Presentation describe VM-VM affinity and anti-affinity rules as another example of business or non-technical constraints on source-target placement.

193. In the July 2, 2019 response, Hillier and Yuyitung argued (or authorized arguing) that the prior art did not disclose the use of business or non-technical constraints to determine source-target placement. Yet, the preceding examples disclosed in Mateo, Wahlert, and VirtualCenter 2.0 show the contrary.

194. Had Hillier or Yuyitung (or anyone else at Cirba) disclosed the Additional Prior Art to the PTO, the examiner would not have allowed the '492 patent to issue with its present claims.

3. The '687 Invalidity Analyses from the 742 Delaware Litigation are material information

195. Hillier and Yuyitung withheld VMware's '687 Invalidity Analyses, which included Dr. Nieh's expert opinions and VMware's detailed invalidity claim charts, that placed the validity of the subject matter claimed in the '492 patent directly at issue. The '687 Invalidity Analyses from the 742 Delaware Litigation were material to the claims that issued as the '492 patent.

196. The '687 Invalidity Analyses explain in detail how the prior art, including the Additional Prior Art, anticipates and/or renders obvious the subject matter claimed in the '492 patent. For example, they identify the specific portions of Mateo, Wahlert, and VirtualCenter 2.0 that disclose the subject matter claimed in the '492 patent.

197. In addition, the '687 Invalidity Analyses were material because they show that Hillier and Yuyitung made (or authorized) affirmative misrepresentations to the PTO in Cirba's July 2, 2019 response in order to overcome the examiner's rejection of the '471 application.

198. Specifically, Hillier and Yuyitung affirmatively misrepresented to the PTO that "Khandekar mentions a 'heuristics engine' but does not provide enough detail for someone

skilled in the art to contemplate a meaningful implementation” and that “Khandekar at most teaches the need for a heuristics engine as part of the system it describes.”

199. The ’687 Invalidity Analyses show that these representations are false. For example, VMware’s invalidity contentions identify specific portions from Khandekar that enabled a person of ordinary skill in the art to configure Khandekar’s “heuristics engine” to place sources (e.g., VMs) onto targets (e.g., hosts) based on business or non-technical constraints. VMware’s detailed claim charts show that Khandekar discloses: (i) a “heuristics engine” that “selects which host machine is most appropriate to provision and deploy [a] VM on”; (ii) that a system designer would “be able to determine which heuristics/rules to implement in the heuristics engine using known design criteria”; and (iii) that the heuristics engine may include “[k]nown expert systems, ‘intelligent assistants’ and other knowledge-based systems and engines that can be embedded in other products and loaded with domain knowledge” to “implement [its] various decision functions.”

200. Likewise, Dr. Nieh’s expert opinions show that Khandekar provides sufficient detail to enable a person of ordinary skill in the art to use business constraints or non-technical factors that can impact source-target placement, such as “software licensing, maintenance windows, [and] service level agreements.” For example, Dr. Nieh’s PI declaration explains that the system disclosed in the Raman reference “matches the requirements and characteristics of a process to the requirements and characteristics of a computing entity” and that those requirements could include non-technical constraints, such as required software for compatibility of a process and computing entity.

201. Moreover, Dr. Nieh’s PI declaration explains that Raman discloses a distributed system for distributed computing that, “when determining whether a processing job can be

placed on a particular computing system,” evaluates a non-technical constraint (*e.g.*, “whether the job’s licensing requirements” are “a match for the particular computing system”). Thus, the opinions disclosed in Dr. Nieh’s PI declaration would have shown the examiner how a person of ordinary skill in the art would have recognized the benefit of adding Raman’s license capabilities to existing source-target placement systems, such as the one disclosed in Khandekar, to use software licenses efficiently and other benefits described in Raman.

202. Had Hillier or Yuyitung (or anyone else at Cirba) disclosed the ’687 Invalidity Analyses to the PTO, the examiner would not have allowed the ’492 patent to issue with its present claims.

203. The withheld information, including the 742 Delaware Litigation, the Additional Prior Art, and the ’687 Invalidity Analyses, is non-cumulative to the information that was already before the examiner at the time the examiner allowed the ’471 application. As discussed above, the withheld information discloses at least “placing the source systems onto the target systems in accordance with technical, business, and workload constraints,” as recited in claim 1.

D. Hillier and Yuyitung Had Specific Intent to Deceive the PTO

204. During prosecution of the ’492 patent, Hillier and Yuyitung knowingly and intentionally failed to disclose material, non-cumulative, prior art known to them from the 742 Delaware Litigation and made affirmative misrepresentations to the PTO.

205. Hillier has substantially participated in the 742 Delaware Litigation. For example, he was designated by Cirba as a corporate witness to testify on topics related to the conception, reduction to practice, prosecution, and prior art of the ’687 patent as well as Cirba’s product operating with VMware’s VirtualCenter. He submitted multiple declarations and testified by deposition on July 17 and October 31, 2019 in the 742 Delaware Litigation. And before the PTO issued the ’492 patent, Cirba identified Hillier as a “will call” trial witness for its

case-in-chief at the January 2020 trial on the '687 patent, where he subsequently testified as Cirba's first witness. At trial, just two weeks after the PTO issued the '492 patent, he testified about his personal knowledge of the material, non-cumulative VirtualCenter 2.0 prior art discussed above that he had failed to disclose to the PTO during the prosecution of the '492 patent. Having participated in the 742 Delaware Litigation to this extent, Hillier knew of the importance of the withheld information to the '471 application, and specifically the limitation that he and Yuyitung argued was allegedly not disclosed by the prior art.

206. Likewise, Yuyitung has participated in the 742 Delaware Litigation. For example, Cirba identified Yuyitung as a person with knowledge of the conception and reduction to practice of the inventions claimed in the '687 patent, and Yuyitung was deposed on October 18, 2019.

207. Despite Hillier's and Yuyitung's extensive involvement in the 742 Delaware Litigation and familiarity with the underlying prior art and invalidity analyses, they chose to hide the existence of the 742 Delaware Litigation from the PTO, and to say nothing to the PTO about the Additional Prior Art and the '687 Invalidity Analyses from the 742 Delaware Litigation. Hillier and Yuyitung made false representations and actively withheld non-cumulative and material information with the specific intent to deceive the PTO.

208. For example, Hillier and Yuyitung chose to only selectively disclose a small subset of the material prior art that VMware provided to Cirba during the 742 Delaware Litigation. Their selective disclosure purposefully omitted important prior art that disclosed placing sources onto targets based on business or non-technical constraints, such as Mateo, Wahlert, and VMware's VirtualCenter (including the VirtualCenter Resource Management Guide, the VMotion 2006 Datasheet, and the Waldspurger 2005 Presentation).

209. As part of their job functions, Hillier and Yuyitung were intimately familiar with VMware's VirtualCenter as well as undisclosed prior art and invalidity analyses related to VirtualCenter. This is because Cirba's product interfaces and is compatible with VirtualCenter, including during the period of the prosecution of the '492 patent.

210. Hillier and Yuyitung similarly chose to hide the '687 Invalidity Analyses related to business or non-technical constraints from the PTO. For example, VMware's invalidity contentions and Dr. Nieh's expert opinions contained detailed analysis of how the prior art disclosed placing sources onto targets based on business or non-technical constraints.

211. While actively withholding prior art disclosing placing sources onto targets using business or non-technical constraints, Hillier and Yuyitung (i) amended the claims of the '492 patent to recite "placing the source systems onto the target systems in accordance with technical, business, and workload constraints determined in the compatibility analysis" and (ii) overcame the examiner's rejection by arguing that the prior art did not disclose "placing source systems based on technical, business and workload constraints determined in the compatibility analysis." Hillier and Yuyitung also made false representations to the PTO that Khandekar did not enable a person of ordinary skill in the art to configure Khandekar's "heuristics engine" to place sources onto targets based on business or non-technical constraints. Hillier and Yuyitung did so with the specific intent to deceive the PTO.

212. Thus, the single most reasonable inference to draw from the above evidence is that Hillier and Yuyitung, with intent to deceive the PTO: (1) withheld each of the 742 Delaware Litigation, the Additional Prior Art, and the '687 Invalidity Analyses from the PTO; and (2) made affirmative misrepresentations to the PTO regarding the claimed functionality that was allegedly not found in the prior art but was in fact described in the withheld information. Their

deliberate and knowing omissions and misrepresentations, coupled with their specific intent to deceive the PTO, constitutes inequitable conduct that renders all claims of the '492 patent unenforceable.

DEFENSE NO. 15

(Unenforceability of '459 Patent: Inequitable Conduct Based on Infectious Unenforceability)

213. VMware hereby re-alleges and incorporates by reference the allegations of Paragraphs 144-212 as if fully recited herein.

214. As the '459 patent is a continuation of the '492 patent, Cirba's inequitable conduct during the prosecution of the '492 patent also renders the claims of the '459 patent unenforceable.

215. The '459 patent issued on March 16, 2021, from U.S. Patent Application No. 16/687,966 (the "'966 application"). Cirba filed the '966 application on November 19, 2019—the same day that VMware served Cirba with its final invalidity contentions in the 742 Delaware Litigation.

216. As with the '323 application and the '471 application, the '966 application named Hillier and Yuyitung as the inventors. Cirba IP, Inc. is the named applicant on the '966 application, and the assignment of the '966 application to Cirba IP, Inc. was recorded the same day that the application was filed.

217. The '966 application is a continuation of the '471 application. They share a nearly identical specification, which includes the figures and detailed description.

218. Cirba is asserting the '459, '492, and '687 patents against overlapping sets of technologies. Cirba alleges that all three cover similar subject matter related to the placement of source systems by evaluating the source systems against target systems based on constraints (or considerations), such as technical, business, and workload constraints (or considerations).

219. For example, claim 1 of the '459 patent recites:

[1pre] A system for determining placement of source computer systems on target computer systems, the system configured to execute operations causing the system to:

[1a] collect data for a collection of computer systems, the collection of computer systems comprising a plurality of source systems and a plurality of target systems;

[1b] determine a placement of at least one source system from the collection of computer systems on at least one target system from the collection of computer systems by employing the following operations:

[1b.1] evaluate compatibility between a specific source system from the plurality of source systems and a specific target system from the plurality of target systems by evaluating one or more rules that operate against attributes or data relating to the source and target systems being evaluated;

[1b.2] evaluate compatibility between the specific source system from the plurality of source systems and one or more other source systems either already placed on the specific target system, or being evaluated for placement onto the specific target system, to determine if the specific source system can be placed with those other source systems on the specific target system, by evaluating one or more rules that operate against attributes or data relating to the source systems;

[1b.3] evaluate compatibility between the specific source system and the specific any one of the plurality of target system by evaluating the impact on resource utilization of the specific target system of placing the specific source system on the specific target system, in combination with the one or more other source systems, either already placed on the specific target system, or being evaluated for placement onto the specific target system; and

[1c] issue instructions to place the at least one source system on the at least one target system in accordance with the determined placement.

220. Claim 2 of the '459 patent recites:

The system of claim 1, wherein the at least one source system being placed on the at least one target system comprises a new computer system that is not currently running on a target system in the collection of computer systems.

221. Claim 5 of the '459 patent recites:

The system of claim 2, wherein the rule-based compatibility analysis evaluates technical considerations.

222. Claim 7 of the '459 patent recites:

The system of claim 2 wherein the rule-based compatibility analysis evaluates business considerations.

223. The '459 patent claims, in part, a system for determining placement of source computer systems on target computer systems based on rule-based compatibility (*see* claim 1).

The claimed rule-based analyses involve workload considerations (e.g., resource utilization (*see* claim limitation [1b.3])), technical considerations (*see* claim 5), and business considerations (*see* claim 7).

224. The same PTO examiner examined the '966 application and the '471 application and ultimately allowed them to issue as the '459 patent and the '492 patent, respectively. A different examiner at the PTO examined the '323 application and ultimately allowed it to issue as the '687 patent. Cirba's prosecution agent, Brett Slaney at Blake, Cassel & Graydon LLP, filed and prosecuted the '966 application.⁴

225. On January 11, 2021, the PTO issued a Notice of Allowance allowing all pending claims in the '966 application. The PTO stated that it allowed the '966 application because the independent claims recite claim limitations and purported inventive concepts similar to those in the '492 patent. Specifically, the Notice of Allowance states:

⁴ Slaney left Blake, Cassels & Graydon LLP and began working at CPST Intellectual Property in February 2020.

Claims 2, 30, and 58 contain similar limitations/inventive concepts to the allowable limitations of at least Claim 1 of prior US AP.

Nos. 11/535308 (US PAT No. 7,680,754), 11/738936 (US PAT

No. 8,793,679), and 14/341471 (US PAT No. 10,523,492)

respectively, along with further narrowing limitations (e.g.,

“. . . evaluate compatibility between any of the two or more of the plurality of source systems . . . in combination with any other source systems . . . determine a placement of at least one source system of the collection of system . . . by employing the evaluating operations . . .”) which is not taught by the prior-art.

Thus, Claims 2-58 are considered allowable for analogous reasons as highlighted in related prior US AP. Nos. 11/535308, 11/738936, 14/341471 when reading the claims in light of the specification, as per, MPEP §2111.01 or Toro Co. v. White Consolidated Inc., 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999).

226. Cirba’s inequitable conduct during prosecution of the ’492 patent bears an immediate and necessary relation to the enforcement of the ’459 patent. First, there is a significant relationship between the ’492 and ’459 patents. The ’459 patent is a continuation of the ’492 patent. It shares an almost identical specification with the ’492 patent. It also claims similar subject matter to the ’492 patent, including, for example, the placement of source systems on target systems, by evaluating the source systems against target systems based on three types of constraints (or considerations): technical, business, and workload constraints (or considerations).

227. In addition, the PTO’s Notice of Allowance makes clear that it allowed the ’459 patent at least in part because the ’459 patent recites claim limitations similar to those in the ’492 patent. Therefore, Cirba’s inequitable conduct in the prosecution of the ’492 patent is related to the claims of the ultimately-issued ’459 patent. By intentionally withholding non-cumulative information that is material to the patentability of the ’492 patent and making affirmative misrepresentations regarding the claimed functionality that was described in the

withheld information, Cirba's inequitable conduct during the prosecution of the earlier-prosecuted '492 patent infects its ability to enforce the later-issued '459 patent.

228. Cirba did not cure its inequitable conduct during the prosecution of the '492 patent. For example, Cirba did not (i) expressly advise the PTO of its omission(s) and misrepresentation(s); (ii) advise the PTO of the underlying facts and suggest that further examination in light thereof may be required if any PTO action had been based on the misrepresentation(s); and (iii) establish patentability on the basis of a factually accurate and complete record.

DEFENSE NO. 16
(Unenforceability of '459 Patent Based on Inequitable Conduct)

229. VMware hereby re-alleges and incorporates by reference the allegations of Paragraphs 144-228 as if fully recited herein.

230. The '459 patent is unenforceable due to Cirba's inequitable conduct when the named inventors of both the '492 patent and the '459 patent, Andrew Hillier and Tom Yuyitung, and Cirba's prosecution agent Brett Slaney, having a duty of candor and good faith in dealing with the PTO, withheld information material to patentability of the '459 patent with a specific intent to deceive the PTO.

A. Background

231. As discussed *supra* in paragraphs 214-225, Cirba filed the '966 application on November 19, 2019—the same day that VMware served Cirba with its final invalidity contentions in the 742 Delaware Litigation. The '966 application is a continuation of the '471 application. They share a nearly identical specification, which includes the figures and detailed description.

232. On July 2, 2020, Cirba's prosecution agent Slaney—on behalf of Cirba—filed a preliminary amendment, cancelling pending claim 1 of the '966 application and adding new claims 2-58.

233. For example, the newly-filed claim 2 recited:

A system for determining placement of a source system on a target system, the system configured to execute operations causing the system to:

collect data for a collection of systems, the collection of systems comprising a plurality of source systems and a plurality of target systems;

evaluate compatibility between any one of the plurality of source systems and any one of the plurality of target systems by evaluating one or more rules that operate against attributes or data relating to the source and target systems being evaluated;

evaluate compatibility between any two or more of the plurality of source systems by evaluating one or more rules that operate against attributes or data relating to the two or more source systems;

evaluate compatibility between any one of the plurality of source systems and any one of the plurality of target systems by evaluating the impact on resource utilization of the target system of placing that source system on that target system, in combination with any other source systems, either already placed on that target system, or being evaluated for placement onto that target system;

determine a placement of at least one source system of the collection of systems on at least one target system of the collection of systems by employing the evaluating operations on any one or more of the systems of the collection of systems; and

issue instructions to place the at least one source system on the at least one target system in accordance with the determining.

234. On July 7, 2020, Slaney—on behalf of Cirba—filed Information Disclosure Statements (collectively, the “July 7, 2020 IDS”). In the July 7, 2020 IDS, Cirba, including

Hillier and Yuyitung, withheld from the PTO at least the following information material to the patentability of the '966 application:

- The existence of the 742 Delaware Litigation;
- The additional prior art that VMware provided to Cirba during the 742 Delaware Litigation, including Wahlert, the VirtualCenter 2006 Datasheet, the VMotion 2006 Datasheet, the VirtualCenter Resource Management Guide, and the Waldspurger 2005 Presentation (the “‘459 Additional Prior Art”); and
- The '687 Invalidity Analyses.

235. In the July 7, 2020 IDS, Hillier withheld from the PTO the following additional information material to the patentability of the '966 application:

- The trial testimony during the 742 Delaware Litigation explaining how the '687 patent is invalidated by the prior art, including testimony from Dr. Nieh and Dr. Waldspurger (“the '687 Invalidity Trial Testimony”).

236. On October 1, 2020, VMware filed a petition for *inter partes* review of the '492 patent (“the '492 IPR Petition”). The '492 IPR Petition explains in detail how the '492 patent is invalid based on the following grounds:

- Anticipation by Power (U.S. Patent 7,616,583);
- Obviousness based on Power in view of Kerr (U.S. Patent 8,606,886); and
- Obviousness based on Van Hoose (U.S. Patent Pub. 2004/0034577) in view of Le (U.S. Patent 7,356,679).

237. On the same day, VMware mailed a copy of the '492 IPR Petition to Slaney's firm CPST Intellectual Property Inc.

238. Four days later, on October 5, 2020, the PTO issued a Notice of Allowance allowing all pending claims in the '966 application. The PTO stated that it allowed the '966 application because its claims recite claim limitations and purported inventive concepts similar to those in the '492 patent. Specifically, the Notice of Allowance states:

Claims 2, 30, and 58 contain similar limitations/inventive concepts to the allowable limitations of at least Claim 1 of prior US AP. Nos. 11/535308 (US PAT No. 7,680,754), 11/738936 (US PAT No. 8,793,679), and 14/341471 (US PAT No. 10,523,492) respectively, along with further narrowing limitations (e.g., “*... evaluate compatibility between any of the two or more of the plurality of source systems ... in combination with any other source systems ... determine a placement of at least one source system of the collection of system ... by employing the evaluating operations ...*” which is not taught by the prior-art.

Thus, Claims 2-58 are considered allowable for analogous reasons as highlighted in related prior US AP. Nos. 11/535308, 11/738936, 14/341471 when reading the claims in light of the specification, as per, MPEP §2111.01 or Toro Co. v. White Consolidated Inc., 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999).

239. On December 10, 2020, Slaney—on behalf of Cirba—filed a Request for Continued Examination and amended the claims “to rearrange the ‘determine/determining’ operation and to clarify the protection being sought.” It also canceled pending claims 4, 25, 32, and 53 and added new claims 59-68.

240. Specifically, pending claim 2 was amended as follows:

(Currently amended) A system for determining placement of [[a]] source computer systems on [[a]] target computer systems, the system configured to execute operations causing the system to:

collect data for a collection of computer systems, the collection of computer systems comprising a plurality of source systems and a plurality of target systems;

determine a placement of at least one source system from the collection of computer systems on at least one target system from the collection of computer systems by employing the following operations:

evaluate compatibility between a specific source system from any one of the plurality of source systems and a specific target system from any one of the plurality of target systems by evaluating one or more rules that operate against attributes or data relating to the source and target systems being evaluated;

evaluate compatibility between any two or more of the specific source system from the plurality of source systems and one or more other source systems either already placed on the specific target system, or being evaluated for placement onto the specific target system, to determine if the specific source system can be placed with those other source systems on the specific target system, by evaluating one or more rules that operate against attributes or data relating to the two or more source systems;

evaluate compatibility between any one of the plurality of the specific source system systems and the specific any one of the plurality of target system systems by evaluating the impact on resource utilization of the specific target system of placing [[that]] the specific source system on [[that]] the specific target system, in combination with [[any]] the one or more other source systems, either already placed on [[that]] the specific target system, or being evaluated for placement onto [[that]] the specific target system; and

determine a placement of at least one source system of the collection of systems on at least one target system of the collection of systems by employing the evaluating operations on any one or more of the systems of the collection of systems; and

issue instructions to place the at least one source system on the at least one target system in accordance with the determined placement~~determining~~.

241. On December 10, 2020, Slaney—on behalf of Cirba—filed additional Information Disclosure Statements (collectively, the “December 10, 2020 IDS”). The examiner found the December 10, 2020 IDS defective as they failed to identify many references properly, e.g., by including the “date[s] and/or page numberings” and informed Cirba that he did not consider those references, including, for example, references relating to VMware’s VirtualCenter.

242. In the December 10, 2020 IDS, Cirba, including Hillier, Yuyitung, and Slaney, withheld from the PTO at least the following information material to the patentability of the ’966 application:

- The existence of the 742 Delaware Litigation;

- The additional prior art that VMware provided to Cirba during the 742 Delaware Litigation, including, for example, Wahlert, the VirtualCenter 2006 Datasheet, the VMotion 2006 Datasheet, and the Waldspurger 2005 Presentation;
- The '687 Invalidity Analyses;
- The '687 Invalidity Trial Testimony; and
- The '492 IPR Petition.

243. Despite its knowledge of (i) VMware's '492 IPR Petition and (ii) the PTO's allowance of the '966 application based on "similar limitations" recited in the '492 patent, Cirba, including Hillier, Yuyitung, and Slaney, intentionally concealed the '492 IPR Petition from the PTO. Instead of disclosing the '492 IPR Petition in its December 10, 2020 IDS, it vaguely listed "VMware Notice of Related Proceedings; filed October 2, 2020" without identifying what the "Related Proceedings" were—much less identifying the IPR proceedings by case number or noting that they involved the parent '492 patent. This intentional concealment of the '492 IPR petition is highlighted by Cirba's clear disclosure to the PTO of other IPR proceedings. Specifically, Cirba disclosed Turbonomic's IPR petition against the '687 patent by IPR case number and date on the very next line of the December 10, 2020 IDS: *Turbonomic, Inc. v. Cirba IP Inc.*, IPR2020-01340 (P.T.A.B. Jul. 21, 2020). Cirba also disclosed other IPRs by IPR case number and date, even though those IPRs do not involve Cirba and are not relevant to the '459 patent, including *Amazon Inc. v. M2M Sols. LLC*, IPR2019-01204 (P.T.A.B. Jan. 23, 2020) and *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469 (P.T.A.B. Feb. 13, 2020).

244. Cirba, including Hillier and Yuyitung, intentionally concealed the existence of the 742 Delaware Litigation that included the extensive invalidity record for the '687 patent

(including the '687 Invalidity Analyses and the '687 Invalidity Trial Testimony) and misled the PTO by identifying only the early-stage 272 Delaware Litigation. The examiner stated that he did not consider the 272 Delaware Litigation because Cirba failed to identify the “date and/or page numberings” of relevant information. Cirba’s intentional concealment of the 742 Delaware Litigation and its invalidity record for the '687 patent is highlighted by Cirba’s clear disclosure to the PTO of another case that did not involve Cirba or VMware, does not address patentability, and is not relevant to the '459 patent at all: “Vivid Techs, Inc. v. AM. Sci. & Eng’g, Inc., 200 F.3d 795 (Fed. Cir. 2999 [sic]).”

245. The VirtualCenter Resource Management Guide is the only reference listed in paragraphs 234 and 235—as a material reference missing from Cirba’s July 7, 2020 IDS—that was later identified in Cirba’s December 10, 2020 IDS. Cirba included it in the December 10, 2020 IDS, filed by Slaney. But the examiner stated that he did not consider that reference because Cirba failed to identify the “date and/or page numberings.” Thus, even among the references Cirba did identify to the PTO, Cirba, including Hillier, Yuyitung, and Slaney, omitted material information from consideration and failed to cure the deficiencies in its IDS, thereby misleading the PTO about the patentability of the '966 application’s claims.

246. On January 11, 2021, the PTO issued another Notice of Allowance allowing all pending claims in the '966 application. The PTO again stated that it allowed the '966 application because the independent claims recite claim limitations and purported inventive concepts similar to those in the '492 patent. Specifically, the Notice of Allowance states:

Claims 2, 30, and 58 contain similar limitations/inventive concepts to the allowable limitations of at least Claim 1 of prior US AP. Nos. 11/535308 (US PAT No. 7,680,754), 11/738936 (US PAT No. 8,793,679), and 14/341471 (US PAT No. 10,523,492) respectively, along with further narrowing limitations (e.g., “... evaluate compatibility between any of the two or more of the

plurality of source systems . . . in combination with any other source systems . . . determine a placement of at least one source system of the collection of system . . . by employing the evaluating operations . . . “) which is not taught by the prior-art.

Thus, Claims 2-58 are considered allowable for analogous reasons as highlighted in related prior US AP. Nos. 11/535308, 11/738936, 14/341471 when reading the claims in light of the specification, as per, MPEP §2111.01 or Toro Co. v. White Consolidated Inc., 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999).

247. The Notice of Allowance specifically stated that the December 10, 2020 IDS “fail[ed] to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because exact date and/or page numberings are missing in the IDS items.” As a result, the examiner stated that the December 10, 2020 IDS has “been placed in the application file, but the information referred to therein have not been considered as to the merits.” The examiner advised that the items that were not considered could be included in a “re-submission” but instructed Cirba to “be sure to add exact dates and page numbering accordingly to each IDS item.”

248. Despite knowing that the examiner had not considered its defective December 10, 2020 IDS, Cirba, including Hillier, Yuyitung, and Slaney, did nothing to fix the defects in that IDS and did not resubmit the IDS or its contents to the examiner for consideration before issuance. Rather, Cirba paid the issue fees for the ’966 application on January 15, 2021—four days after receiving the Notice of Allowance.

249. On January 22, 2021, VMware filed a request for *ex parte* reexamination of the ’687 patent (“the ’687 Reexam Request”), which explains in detail how the ’687 patent is invalid based on the following grounds:

- Obviousness based on VirtualCenter Resource Management Guide, VMware Infrastructure, Resource Management with VMware DRS, June 13, 2006, and Wahlert; and
- Obviousness based on Taylor (U.S. Patent No. 7,836,452) and Wahlert.

250. On the same day, VMware mailed a copy of the '687 Reexam Request to Slaney's firm CPST Intellectual Property Inc.

251. On March 1, 2021, the PTO granted VMware's request for reexamination of the '687 patent ("the '687 Reexam") and mailed a copy of its order to Slaney's firm CPST Intellectual Property Inc.

252. Cirba, including Hillier, Yuyitung, and Slaney, chose not to submit the '687 Reexam or withdraw the '966 application from issue so that the examiner could consider the '687 Reexam request.

253. The PTO issued the '459 patent on March 16, 2021.

B. Hillier, Yuyitung, and Slaney Violated Their Duties of Candor to the PTO

254. Under 37 C.F.R. § 1.56, Hillier, Yuyitung, and Slaney, as inventors and individuals associated with the filing and prosecution of the '966 application, each owed a duty of candor and good faith in their dealings with the PTO. This includes a duty to disclose to the PTO all information known to that individual to be material to patentability.

255. Andrew Hillier and Tom Yuyitung each executed sworn inventor oaths on or about January 22, 2015 as part of the prosecution of the '966 application. These oaths state: "I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both."

256. Pursuant to 37 C.F.R. § 1.63(c), "[a] person may not execute an oath or declaration for an application unless that person has reviewed and understand the contents of the application, including the claims, and is aware of the duty to disclose to the [U.S. Patent and Trademark] Office all information known to the person to be material to patentability as defined in [37 C.F.R.] § 1.56."

257. Hillier and Yuyitung were simultaneously involved in both the 742 Delaware litigation and the prosecution of the '459 patent. Both Hillier and Yuyitung were aware of the 742 Delaware Litigation (and were deposed as part of the litigation), the '459 Additional Prior Art, the '687 Invalidity Analyses, the '492 IPR Petition, and the '687 Reexam before the issuance of the '459 patent. In addition, Hillier was aware of the '687 Invalidity Trial Testimony as he was at trial and testified. Hillier, the Co-Founder and CTO of Cirba, and Yuyitung, Chief Architect, also were involved in prosecution and trial activity for the '687 patent, the '492 patent, and the '459 patent.

258. Slaney filed and prosecuted the '966 application. He signed all papers filed with the PTO during prosecution of the '966 application, including:

- Application Data Sheet dated November 19, 2019;
- Reply to Notice to File Missing Parts dated July 2, 2020;
- Preliminary Amendment dated July 2, 2020;
- Claim Amendment dated December 10, 2020;
- Information Disclosure Statements dated July 7, 2020, and December 10, 2020;
- Requests for Continued Examination dated December 10, 2020; and
- Issue Fee Payment Form dated January 15, 2021.

259. Slaney was at least aware of the '492 IPR Petition and the '687 Reexam before the issuance of the '459 patent because he received (i) a copy of the '492 IPR Petition and the '687 Reexam Request from VMware; and (ii) a copy of the order granting VMware's '687 Reexam Request from the PTO. He also was aware that the VirtualCenter Resource Management Guide, which he added to the December 10, 2020 IDS and was later included in the

'687 Reexam Request, had not been considered by the PTO before he submitted the Issue Fee Payment Form under his signature.

260. Hillier, Yuyitung, and Slaney violated their duties of candor to the PTO when they knowingly and affirmatively chose not to disclose the following material information in the December 10, 2020 IDS—or at any other time before the '459 patent issued:

- the '687 Reexam; and
- the '492 IPR Petition.

261. Hillier and Yuyitung further violated their duties of candor to the PTO when they knowingly and affirmatively chose not to disclose the following material information in the July 7, 2020 and December 10, 2020 IDS—or at any other time before the '459 patent issued:

- the 742 Delaware Litigation;
- the '459 Additional Prior Art; and
- the '687 Invalidity Analyses.

262. Hillier further violated his duties of candor to the PTO when he knowingly and affirmatively chose not to disclose the following material information in the July 7, 2020 and December 10, 2020 IDS—or at any other time before the '459 patent issued:

- the '687 Invalidity Trial Testimony.

C. The Withheld Information Is Material to the Patentability of the '459 Patent

263. The withheld information is material to the patentability of the subject matter claimed in the '459 patent. It also is non-cumulative to the information that was already before the examiner at the time the examiner allowed the '966 application. The disclosures and information provided by the withheld items below are not disclosed by other materials in the record, and the examiner allowed the claims of the '459 patent without issuing any rejections that

applied other prior art. Had Hillier, Yuyitung, or Slaney (or anyone else at Cirba) disclosed the withheld items, the examiner would not have allowed the claims of the '459 patent.

1. The 742 Delaware Litigation is material information

264. Hillier and Yuyitung chose to keep the PTO in the dark about the 742 Delaware Litigation despite their knowledge that the suit centered on claims directed to subject matter that was substantially similar to the claims of the '459 patent. Hillier and Yuyitung were under a duty to disclose the 742 Delaware Litigation.

265. The 742 Delaware Litigation is material to the patentability of the '459 patent at least because the '687 patent claims substantially similar subject matter to the '459 patent. *See* MPEP § 2001.06(c). The substantial overlap between the subject matter that Cirba accuses of infringing the '459 and '687 patents shows that the prior art and invalidity analyses from the 742 Delaware Litigation likewise apply to the claims of the '459 patent.

266. In addition, the 742 Delaware Litigation is material to the patentability of the '492 patent for the reasons discussed in paragraphs 183-185. The withheld 742 Delaware Litigation would have prevented the claims in the '459 patent from issuing for at least the following additional reasons: (1) the '459 patent and the '492 patent (i) share a common specification, (ii) recite similar claim limitations, and (iii) cover similar subject matter, as indicated by Cirba's infringement allegations; and (2) the examiner allowed the claims in the '459 patent to issue because they recited claim limitations and purported inventive concepts similar to those in the '492 patent.

267. Had Hillier or Yuyitung disclosed the 742 Delaware Litigation to the PTO, the examiner would not have allowed the claims of the '459 patent.

2. The Additional '459 Prior Art from the 742 Delaware Litigation is material information

268. Hillier and Yuyitung also withheld the '459 Additional Prior Art. For example, Hillier and Yuyitung withheld at least the following non-cumulative prior art references, each of which is material to the patentability of the '459 patent: Wahlert, the VirtualCenter 2006 Datasheet, the VMotion 2006 Datasheet, and the Waldspurger 2005 Presentation. Furthermore, when the examiner told them (and Slaney) that they had not properly disclosed or made of record the VirtualCenter Resource Management Guide in their December 20, 2020 IDS and therefore he did not consider it, they did not cure their improper disclosure of that reference before the '459 patent issued.

269. The '459 Additional Prior Art is material to the patentability of the '459 patent for at least the same reasons that it is material to the patentability of the '492 patent. As discussed in paragraphs 186-194, Wahlert and VirtualCenter 2.0 (including, for example, the VirtualCenter 2006 Datasheet, the VMotion 2006 Datasheet, the VirtualCenter Resource Management Guide, and the Waldspurger 2005 Presentation) are material to the patentability of the '492 patent because each discloses “placing the source systems onto the target systems in accordance with technical, business, and workload constraints,” among other limitations, as recited in independent claim 1 of the '492 patent. Because (1) the '459 patent and the '492 patent claim similar subject matter, and (2) the examiner allowed the claims in the '459 patent as they recite claim limitations and purported inventive concepts similar to those in the '492 patent, the '459 Additional Prior Art would have prevented the claims of the '459 patent from issuing.

270. Specifically, similar to the '492 patent, the '459 patent claims a system for determining placement of source computer systems on target computer systems based on rule-based compatibility (*see* claim 1). And like the '492 patent, the claimed rule-based analyses of

the '459 patent involve workload considerations (e.g., resource utilization (*see* claim limitation [1b.3])), technical considerations (*see* claim 5), and business considerations (*see* claim 7).

Wahlert and VirtualCenter 2.0 are material to the patentability of the '459 patent because, among other reasons, each discloses determining a placement of source computer systems on target computer systems and each discloses performing a rule-based compatibility evaluation considering, for example, workload, technical, and business factors, as claimed in the '459 patent.

271. Wahlert would have prevented issuance of the '459 patent. Wahlert discloses a system for determining placement of source computer systems on target computer systems based on rule-based compatibility such as rule-based compatibility based on workload considerations and business or non-technical considerations. As an example, Wahlert discloses determining whether a source server is compatible for placement on a target server based on “non-utilization factors” and placing sources to account for software licensing requirements, which Cirba identified during prosecution of the '492 patent as an example of business considerations that were allegedly not disclosed in the prior art. Wahlert also discloses the consideration of resource utilization when placing source systems on target systems and evaluating other source systems for placement onto the same target system. Thus, Wahlert discloses material portions of claims 1, 5, and 7 of the '459 patent that Cirba claimed to the PTO were not in the prior art of record for the '492 patent on which the PTO relied in allowing the '459 patent.

272. Similarly, the undisclosed descriptions of the system prior art VirtualCenter 2.0 (including, for example, the VirtualCenter 2006 Datasheet, the VMotion 2006 Datasheet, the VirtualCenter Resource Management Guide, and the Waldspurger 2005 Presentation) would have blocked issuance of the '459 patent. In particular, the undisclosed descriptions of

VirtualCenter 2.0 show how VirtualCenter 2.0 incorporated DRS and High Availability (“HA”) to place source computer systems onto target computer systems based at least in part on an evaluation of their compatibility. For example, VirtualCenter 2.0 evaluated the placement of VMs using VM-VM affinity and/or anti-affinity rules to address systems availability targets, *i.e.*, business or non-technical considerations.

273. In addition, the VirtualCenter Resource Management Guide describes high availability settings, which include several examples of technical, business, and workload considerations for determining placement of source computer systems on target computer systems. The VirtualCenter Resource Management Guide and the Waldspurger 2005 Presentation also describe VM-VM affinity and anti-affinity rules as another example of business or non-technical considerations for determining placement of source computer systems on target computer systems. Thus, VirtualCenter 2.0 discloses material portions of claims 1, 5, and 7 of the ’459 patent that Cirba claimed to the PTO were not in the prior art of record for the ’492 patent on which the PTO relied in allowing the ’459 patent.

274. The undisclosed descriptions of the system prior art VirtualCenter 2.0—that is, the Virtual Center 2006 Datasheet, the VMotion 2006 Datasheet, the VirtualCenter Resource Management Guide, and the Waldspurger 2005 Presentation—are material for an additional reason. They describe VMware products that are closely related or functionally identical to the VMware products that Cirba has accused of infringement in this litigation. To the extent Cirba accuses VMware of infringing the claims of the ’459 patent, VMware systems and publications existing before the priority date of the ’459 patent anticipate and/or render the claims obvious based on those infringement theories.

275. Had Hillier or Yuyitung disclosed the '459 Additional Prior Art to the PTO, the examiner would not have allowed the claims of the '459 patent.

3. The '687 Invalidity Analyses from the 742 Delaware Litigation are material information

276. Hillier and Yuyitung withheld VMware's '687 Invalidity Analyses, including Dr. Nieh's expert opinions and VMware's detailed invalidity claim charts, which placed the validity of the subject matter claimed in the '459 patent directly at issue.

277. The '687 Invalidity Analyses from the 742 Delaware Litigation are material to the claims that issued as the '459 patent. As discussed in paragraphs 195-203, the '687 Invalidity Analyses are material to the patentability of the '492 patent. They explain in detail how the prior art anticipates and/or renders obvious the subject matter claimed in the '687 patent and, by extension, the '492 patent. For example, they identify the specific portions of Wahlert and VirtualCenter 2.0 that disclose the subject matter claimed in the '687 patent and similar subject matter claimed in the '492 patent. Because (i) Cirba makes similar infringement allegations for the '459 patent, the '492 patent, and the '687 patent and (2) the examiner allowed the claims in the '459 patent as they recite claim limitations and purported inventive concepts similar to those in the '492 patent, the '687 Invalidity Analyses are material to the claims of the '459 patent. The '687 Invalidity Analyses thus would have prevented the claims in the '459 patent from issuing.

278. Specifically, like the '492 patent, the '459 patent claims a system for determining the placement of source computer systems on target computer systems based on rule-based compatibility (*see* claim 1). The claimed rule-based analyses are based workload considerations (e.g., resource utilization (*see* claim limitation [1b.3])), technical considerations (*see* claim 5), and business considerations (*see* claim 7). The '687 Invalidity Analyses explain how the asserted prior art, including specific portions of Wahlert and VirtualCenter 2.0, discloses

determining placements of “candidate virtual guests” (VMs) onto “candidate virtual host” systems (hosts) based on rule-based compatibility (involving workload, technical, and business considerations), as required by the ’687 patent. In its initial infringement contentions against the ’492 patent and ’459 patent, Cirba has alleged that the same instrumentality in VMware’s products that allegedly satisfies the ’687 patent’s VM and host elements also satisfies the respective “source system” and “target system” elements recited in the ’492 patent and ’459 patent. The ’687 Invalidity Analyses therefore are material to the ’459 patent’s source-target compatibility evaluations for the same reasons they are material to the ’687 patent’s VM-host compatibility evaluations.

279. Had Hillier or Yuyitung disclosed the ’687 Invalidity Analyses to the PTO, the examiner would not have allowed the claims of the ’459 patent.

4. The ’687 Invalidity Trial Testimony from the 742 Delaware Litigation are material information

280. Hillier withheld the ’687 Invalidity Trial Testimony explaining in detail how VMware’s VirtualCenter renders the ’687 patent invalid, which places the validity of the subject matter claimed in the ’459 patent directly at issue.

281. The ’687 Invalidity Trial Testimony is material to the patentability of the ’459 patent. It explains how the asserted prior art, including specific portions of VirtualCenter 2.0, discloses determining placements of “candidate virtual guests” (VMs) onto “candidate virtual host” systems (hosts) based on rule-based compatibility (involving workload, technical, and business considerations), as required by the ’687 patent. For example, Dr. Waldspurger’s trial testimony explains how VMware invented and developed VMware’s VirtualCenter 2.0 (including the Waldspurger 2005 Presentation) before Cirba’s purported invention. His testimony also describes VM-host placement decisions based on evaluating VMs against hosts

and other VMs using one or more rule sets pertaining to the technical, business and workload considerations. Similarly, Dr. Nieh's trial testimony explains how VMware's VirtualCenter 2.0 discloses similar technology to what Cirba now accuses of infringement. In its initial infringement contentions against the '492 patent and '459 patent, Cirba has alleged that the same instrumentality in VMware's products that allegedly satisfies the '687 patent's VM and host elements also satisfies the respective "source system" and "target system" elements recited in the '492 patent and the '459 patent. The '687 Invalidity Trial Testimony therefore is material to the '459 patent's source-target compatibility evaluations for the same reasons it is material to the '687 patent's VM-host compatibility evaluations.

282. Had Hillier disclosed the '687 Invalidity Trial Testimony to the PTO, the examiner would not have allowed the claims of the '459 patent.

5. The '687 Reexam is material information

283. Hillier, Yuyitung, and Slaney withheld the '687 Reexam, which explains in detail why the '687 patent is invalid in view of certain prior art, including VirtualCenter Resource Management Guide and Wahlert. The '687 Reexam also places the validity of the subject matter claimed in the '459 patent directly at issue.

284. The '687 Reexam is material to the patentability of the '459 patent because it explains how the asserted prior art, such as Wahlert and VirtualCenter 2.0 (through the related VirtualCenter Resource Management Guide), discloses determining placements of "candidate virtual guests" (VMs) onto "candidate virtual host" systems (hosts) based on rule-based compatibility (involving workload, technical, and business considerations), as required by the '687 patent. In its initial infringement contentions against the '492 patent and '459 patent, Cirba has alleged that the same instrumentality in VMware's products that allegedly satisfies the '687 patent's VM and host elements also satisfies the respective "source system" and "target system"

elements recited in the '492 patent and '459 patent. The '687 Reexam therefore is material to the '459 patent's source-target compatibility evaluations for the same reasons it is material to the '687 patent's VM-host compatibility evaluations.

285. Had Hillier, Yuyitung, or Slaney disclosed the '687 Reexam to the PTO, the examiner would not have allowed the claims of the '459 patent.

6. The '492 IPR Petition is material information

286. Hillier, Yuyitung, and Slaney chose to keep the PTO in the dark about the '492 IPR Petition despite their knowledge that the '492 IPR Petition centered on claims directed to subject matter substantially similar to the claims of the '459 patent and despite knowing that the PTO allowed the claims in the '459 patent because they recite claim limitations and purported inventive concepts similar to those in the '492 patent.

287. The '492 IPR Petition is material to the claims that issued with the '459 patent. The petition explains in detail how the prior art anticipates and/or renders obvious the subject matter claimed in the '492 patent. As the PTO allowed the '459 patent because it recites claim limitations similar to those in the '492 patent, the '492 IPR Petition would have prevented the claims in the '966 application from issuing.

288. For example, similar to the '492 patent, the '459 patent claims a system for determining placement of source computer systems on target computer systems based on rule-based compatibility (*see* claim 1). The claimed rule-based analyses involve workload considerations (e.g., resource utilization (*see* claim limitation [1b.3])), technical considerations (*see* claim 5), and business considerations (*see* claim 7). The '492 IPR Petition is material to the patentability of the '459 patent because it explains how prior art discloses determining placement of source computer systems on target computer systems based on rule-based compatibility (such

as workload, technical, and/or business considerations), among other limitations, as claimed in the '459 patent.

289. Had Hillier, Yuyitung, or Slaney (or anyone else at Cirba) disclosed the '492 IPR Petition to the PTO, the examiner would not have allowed the '459 patent to issue with its present claims.

D. Hillier, Yuyitung, and Slaney Had Specific Intent to Deceive the PTO

290. During prosecution of the '459 patent, Hillier, Yuyitung, and Slaney knowingly and intentionally failed to disclose non-cumulative information material to the patentability of the '459 patent, including (a) the existence of the 742 Delaware Litigation, (b) the '459 Additional Prior Art, (c) the '687 Invalidity Analyses, (d) the '687 Invalidity Trial Testimony, (e) the '687 Reexam, and (f) the '492 IPR Petition. The most reasonable inference is that Hillier, Yuyitung, and Slaney intended to deceive the PTO because: (1) Hillier, Yuyitung, and Slaney were aware that the withheld information is material to the claims of the '459 patent; (2) Hillier, Yuyitung, and Slaney believe that the claims of the '459 patent and the similar claims of the '492 and '687 patents cover VMware products that are related to VMware prior art that was not disclosed to the examiner; and (3) several affirmative acts taken in the course of prosecution of the '459 patent demonstrate that Hillier, Yuyitung, and Slaney sought to obscure this information from the examiner by instead providing the examiner less relevant or incomplete information, as discussed above and laid out further in the paragraphs below.

291. Hillier, Yuyitung, and Slaney actively withheld non-cumulative and material information with the specific intent to deceive the PTO. As discussed in paragraphs 205-206, Hillier and Yuyitung have participated heavily in the 742 Delaware Litigation. Despite their extensive involvement in the 742 Delaware Litigation and familiarity with the underlying prior art and invalidity analyses, they chose to hide the existence of the 742 Delaware Litigation from

the PTO, and to say nothing to the PTO about the '459 Additional Prior Art and the '687 Invalidity Analyses from the 742 Delaware Litigation. Additionally, Hillier chose to conceal the '687 Trial Testimony from the PTO. Rather than disclose the 742 Delaware Litigation and its extensive invalidity analyses for the '687 patent (including invalidity contentions, expert reports, and trial testimony), Hillier, Yuyitung, and Slaney instead disclosed the 272 Delaware Litigation. At that time, the 272 Delaware Litigation could not have informed the PTO about the existence of relevant prior art or invalidity theories, such as those presented in the 742 Delaware Litigation. Cirba also disclosed a case to which it is not a party and that is not relevant to the claims of the '459 patent.

292. Likewise, Hillier and Yuyitung also chose to selectively disclose only a small subset of the material prior art that VMware provided to Cirba during the 742 Delaware Litigation. They purposefully omitted important prior art such as Wahlert and VMware's VirtualCenter (including, for example, the VirtualCenter 2006 Datasheet, the VMotion 2006 Datasheet, the VirtualCenter Resource Management Guide, and the Waldspurger 2005 Presentation).

293. In addition, instead of disclosing VMware's '492 IPR Petition, Hillier, Yuyitung, and Slaney vaguely identified "VMware Notice of Related Proceedings; filed October 2, 2020" in the December 10, 2020 IDS. They did not identify what the "Related Proceedings" were or attach a copy of the Notice, let alone identify the proceedings as an IPR challenging the '966 application's parent. Hillier, Yuyitung, and Slaney intentionally kept the PTO in the dark about VMware's '492 IPR Petition. They further misled the examiner by clearly disclosing IPR proceedings that are less relevant or have no relevance at all.

294. Finally, even after the PTO informed Cirba that it did not consider Cirba's non-compliant December 10, 2020 IDS when allowing the '459 patent, Hillier, Yuyitung, and Slaney chose not to correct the IDS. They instead quickly had the issue fees paid to get the '459 patent issued. They also chose not to submit the '687 Reexam or withdraw the '966 application from issue so that the examiner could consider the '687 Reexam request. Hillier, Yuyitung, and Slaney did so with the specific intent to deceive the PTO.

295. Cirba then sought to assert and ultimately did assert the '459 patent against VMware in the consolidated action one week after it was issued.

296. Thus, there is a single most reasonable inference, based on the above evidence, that Hillier, Yuyitung, and Slaney withheld the 742 Delaware Litigation, the '459 Additional Prior Art, the '687 Invalidity Analyses, the '687 Invalidity Trial Testimony, the '687 Reexam, and the '492 IPR Petition from the PTO with the specific intent to deceive the PTO. Their deliberate and knowing omissions and misrepresentations, coupled with their specific intent to deceive the PTO, constitute inequitable conduct that renders all claims of the '459 patent unenforceable.

DEFENSE NO. 17
(Unclean Hands)

297. VMware hereby re-alleges and incorporates by reference the allegations of Paragraphs 143 to 296 as if fully recited herein.

298. During the prosecution of the '471 application, Cirba, along with inventors Hillier and Yuyitung, deceived the PTO and otherwise acted in bad faith to obtain issuance of the '492 patent. Although the '492 patent never should have issued, Cirba now asserts the same '492 patent against VMware and seeks damages from VMware in this action.

299. Cirba's counterclaim of infringement of the '492 patent by VMware is barred, in whole or in part, due to Cirba's unclean hands.

DEFENSE NO. 18
(Unclean Hands)

300. VMware hereby re-alleges and incorporates by reference the allegations of Paragraphs 143 to 299 as if fully recited herein.

301. During the prosecution of the '966 application, Cirba, along with inventors Hillier and Yuyitung and its prosecution agent Slaney, deceived the PTO and otherwise acted in bad faith to obtain issuance of the '459 patent. Although the '459 patent never should have issued, Cirba now asserts the same '459 patent against VMware and seeks damages from VMware in this action.

302. Cirba's counterclaim of infringement of the '459 patent by VMware are barred, in whole or in part, due to Cirba's unclean hands.

JURY DEMAND

303. Pursuant to Rule 38 of the Federal Rules of Civil Procedure and D. Del. LR 38.1, VMware demands a trial by jury on all issues upon which it may have a trial by jury.

Dated: June 4, 2021

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CERTIFICATE OF SERVICE

I, Anne Shea Gaza, hereby certify that on June 4, 2021, I caused to be electronically filed a true and correct copy of the foregoing document with the Clerk of the Court using CM/ECF, which will send notification that such filing is available for viewing and downloading to the following counsel of record:

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I, Robert M. Vrana, hereby certify that on August 27, 2021, I caused to be electronically filed a true and correct copy of the foregoing document with the Clerk of the Court using CM/ECF, which will send notification that such filing is available for viewing and downloading to the following counsel of record:

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Exhibit 6

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 7



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Thursday, September 16, 2021

By E-mail

Lily Li
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Re: Densify's Response to VMware's Interrogatory No. 36

Dear Lily:

We are in receipt of your August 23, 2021 letter concerning Densify's response to VMware's Interrogatory No. 36. As noted in our interrogatory response (and correspondence with you via email), discovery responsive to VMware's request is ongoing, and Densify will supplement its response as appropriate in view of any additional, non-privileged responsive information.

As previously noted in our September 13, 2021 email, we are diligently working with Mr. Slaney to respond to VMware's subpoena, including producing responsive documents, which we anticipate will occur in the next few weeks. As that process nears its conclusion, we will coordinate with VMware to propose dates for Mr. Slaney's deposition.

Regards,

A handwritten signature in black ink, appearing to read 'WL'.

Wesley L. White

Exhibit 8

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 9

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 10

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 11

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TENNESSEE
WESTERN DIVISION

SPINE SOLUTIONS, INC., a)
Delaware Corporation,)
Plaintiff,)
v.) No. 07-2175-MLV
MEDTRONIC SOFAMOR DANEK, INC.,)
an Indiana corporation;)
MEDTRONIC SOFAMOR DANEK USA,)
INC., a Tennessee corporation)
Defendants.)

REPORT AND RECOMMENDATION

The defendants, Medtronic Sofamor Danek, Inc. and Medtronic Sofamor Danek USA, Inc. (collectively "Medtronic"), have filed the present motion to compel the plaintiff, Spine Solutions, Inc. ("SSI"), to allow the deposition of Mr. Marvin Petry ("Petry"), the prosecuting attorney of the patent-in-suit, U.S. Patent No. 6,936,071 ("the '071 patent"), to be taken. Specifically, Medtronic seeks to depose Petry regarding his knowledge of the amendments to the '071 patent, any non-privileged factual information about communications with the Patent Office, and other information related to the prosecution of the '071 patent which is key to Medtronic's invalidity defense. The motion was filed October 3, 2007, and was referred to the United States Magistrate Judge for a report and recommendation pursuant to 28 U.S.C. §

636 (b) (1) (B) and (C). For the reasons that follow, it is recommended that Medtronic's motion be granted.

PROPOSED FINDINGS OF FACT

A. Procedural History and Background

In the present case, SSI has accused Medtronic of infringing upon its '071 patent by making, exporting, and supplying intervertebral implants covered by claims in the '071 patent. The '071 patent issued from the United States Patent and Trademark Office ("PTO") on August 30, 2005, claiming priority from a Patent Cooperation Treaty ("PCT") application filed on July 2, 1999.

Medtronic contends that the implants it is producing and selling, which were in use a significant time before the issuance of the '071 patent, are fundamentally different than the type of implants described in the '071 patent. Specifically, Medtronic claims that SSI, through Petry, amended the claims in the '071 patent to "add unrelated and unsupported limitations in an effort to profit from Medtronic's products." (Defs.' Mem. Supp. Mot. Compel 4.) Medtronic also states that SSI, through Petry, added nearly a page to the specification of material that was unsupported in the original application in order to support the amended claims. Medtronic argues that it needs to depose Petry because he submitted the amendments to the claims and specification of the '071 patent, and the facts surrounding those amendments are critical to its invalidity defense.

Medtronic also asserts that Petry is the only available source for other essential non-privileged information regarding the prosecution of the '071 patent. In particular, Medtronic seeks to depose Petry about issues involving prior art and interviews with the patent examiner regarding the validity of the '071 patent. Medtronic claims that Petry has information about the facts surrounding the prosecution of the '071 patent and discussions with the patent examiner which are crucial to its invalidity defense. Medtronic argues that Petry's deposition is the only source of this information because patent examiners are not subject to discovery. (Defs.' Mem. Supp. Mot. Compel 6.) Medtronic later states in its reply brief that it intends to seek leave to amend its answer in order to allege inequitable conduct. (Defs.' Reply Br. 3-4.) Medtronic asserts that Petry also has relevant, non-privileged information pertaining to the inequitable conduct defense and should therefore be subject to a deposition. (*Id.*)

In response, SSI argues that, after excluding irrelevant and privileged or protected areas of inquiry, Petry has nothing to offer at a deposition. Specifically, SSI claims that allowing the deposition of opposing counsel is strongly disfavored and Petry has no information to offer that is relevant to Medtronic's invalidity defense. SSI contends that Medtronic's arguments only support taking contested depositions of patent prosecution counsel when inequitable conduct is pled, and that Medtronic has not alleged

such conduct in the instant case. SSI further argues that all of the amendments that Medtronic refers to are accompanied by detailed remarks in the patent prosecution record, and because the prosecution file is a complete account of the prosecution of the '071 patent, any knowledge Petry has of the amendment issues is irrelevant to any invalidity claims that may arise. (Pl.'s Resp. Defs.' Mot. Compel 3-4.) SSI also asserts in its surreply brief that if Medtronic is allowed to amend and plead inequitable conduct, Petry would still have no testimony to offer that would be either relevant or non-privileged. (Pl.'s Surreply Br. 4, 8.)

PROPOSED CONCLUSIONS OF LAW

A. Inequitable Conduct

Since this motion was filed, Medtronic sought and was granted leave to amend its answer to allege inequitable conduct. (See Order Granting Defs.' Mot. Amend Answer, Doc. No. 84, Jan. 4, 2008.) This is significant because SSI states in its present motion that "case law does not support compelling Mr. Petry's deposition regarding matters other than inequitable conduct." (Pl.'s Surreply Br. 4.) Because SSI concedes that prosecuting patent attorneys can be proper subjects for depositions when inequitable conduct has been formally pled, the question in this case becomes whether the inequitable conduct alleged justifies deposing Petry. Medtronic argues that it has a right to depose Petry on the facts and circumstances surrounding the declaration of

Dr. Thierny Marnay, one of the inventors of the '071 patent, submitted to the PTO. Medtronic questions the accuracy of the declaration based on recent discovery. SSI asserts that anything Petry could offer about the facts surrounding the drafting and submission of the Marnay's declaration would be both irrelevant and privileged.

Citing *Nisus Corp. v. Perma-Chink Systems*, 2004 U.S. Dist. LEXIS 29387, at *8 (E.D. Tenn. Sept. 17, 2004), SSI insists that depositions of opposing counsel are strongly disfavored. (Pl.'s Resp. Defs.' Mot. Compel 5.) Specifically, SSI contends that the heightened standard set forth in *Nationwide Mut. Ins. Co. v. Home Ins. Co.*, 278 F.3d 621, 628 (6th Cir. 2002), should be applied before allowing the deposition of opposing counsel to be taken, namely that the party seeking to take the deposition must show that "(1) no other means exist to obtain the information. . .; (2) the information sought is relevant and nonprivileged; and (3) the information is crucial to the preparation of the case." (Pl.'s Resp. Defs.' Mot. Compel 5-6.) SSI suggests that when this heightened standard is applied, deposing Petry should not be allowed because Medtronic has failed to make such a showing.

As a rule, Medtronic is entitled to "discovery regarding any nonprivileged matter that is relevant to any [of its] claim[s] or defense[s]." FED. R. CIV. P. 26(b)(1). Any person, including attorneys, with relevant information may be subject to a

deposition. See FED. R. CIV. P. 30(a)(1) ("A party may . . . depose any person. . . .) In fact, as SSI concedes, depositions of prosecuting patent attorneys in patent infringement cases with a claim of inequitable conduct are not unusual. See, e.g., *Paragon Podiatry Lab., Inc. v. KLM Labs., Inc.*, 984 F.2d 1182, 1193 (Fed. Cir. 1993) (discussing the deposition testimony of a prosecuting patent attorney in connection with an inequitable conduct claim). As this court has previously held, the heightened standard adopted in *Nationwide* only applies when "the attorney to be deposed is either trial/litigation counsel or the subject matter of the deposition may elicit litigation strategy." *Ellipsis, Inc. v. Color Works, Inc.*, 227 F.R.D. 496, 497 (W.D. Tenn. 2005). When the heightened standard is not applied, the party seeking to prevent the taking of a deposition because the information sought is subject to the attorney-client privilege bears the burden of proving that the privilege exists. See *Ross v. City of Memphis*, 423 F.3d 596, 606 (6th Cir. 2005).

In the present case, Petry is not litigation counsel, and SSI does not argue that allowing his deposition to be taken would divulge any litigation strategy. Therefore, the heightened standard used in *Nationwide* is inapplicable in the present case. Accordingly, SSI bears the burden of establishing that the information Medtronic seeks from Petry is privileged. If SSI contends that any relevant information Petry has is privileged, a

mere conclusory statement that the privilege applies is not sufficient to meet SSI's burden and prevent the deposition from being taken. See *Vita-Mix Corp. v. Basic Holdings, Inc.*, No. 1:06 CV 2622, 2007 WL 2344750, at *3 (N.D. Ohio Aug. 15, 2007). Furthermore, any unprivileged information that Petry has regarding the prosecution of the patent would most certainly be relevant to Medtronic's inequitable conduct claim. As a result, Medtronic should be allowed to depose Petry and probe into the relevant facts and circumstances surrounding Dr. Marnay's declaration as they may relate to Medtronic's inequitable conduct claim.

It should, however, be noted that SSI may still instruct Petry to not answer any deposition questions that would require answers giving privileged information. See FED. R. CIV. P. 30(c)(2).

B. Invalidity

Because it is recommended that the motion to compel be granted so that Medtronic may obtain discovery relevant to its inequitable conduct claim, this court need not decide whether compelling a deposition of a prosecuting patent attorney on grounds solely related to an invalidity defense would be proper. It is noted, however, that depositions of prosecuting patent attorneys are not limited to issues only relevant to inequitable conduct. See *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1328 (Fed. Cir. 2003) (prosecuting attorney deposed on issues regarding possible typographical errors in patent).

CONCLUSION

It is recommended that Medtronic's motion to compel the deposition of Petry be granted.

Respectfully submitted this 8th day of January, 2008.

s/ Diane K. Vescovo
DIANE K. VESCOVO
UNITED STATES MAGISTRATE JUDGE

Exhibit 12

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 13

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 14

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 15

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 16

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 17

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 18

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 19

**FILED UNDER SEAL;
Redacted in its Entirety**

Exhibit 20

**FILED UNDER SEAL;
Redacted in its Entirety**